

'It's Important to Know In Time'

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The Newspaper of the Industry

Air Conditioning & REFRIGERATION

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NEWS

'Written To Be Read on Arrival'

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'Partial' Sales Ruled Part of Dealer's Quota

'Freeze' Order Rulings On Transfers, Excess Stock, Chain Stores

WASHINGTON, D. C.—The War Production Board last week issued an interpretation of the "freeze" order L-5-b, ruling that refrigerators that were sold, leased, or traded before 10 a.m. (eastern war time) Feb. 14, but not delivered, shipped, or transferred until after that time, are to be included as part of the retail sales quota permitted under the freeze order.

The freeze order applied to all manufacturers, distributors, and retailers to sell one-twelfth of the number of refrigerators sold by them in 1941 or 100 new refrigerators, whichever is greater.

Stocks in excess of that amount must be held, and retailers may not acquire new stocks to make up the permitted quotas for retail sale.

No Time Limit on Sale Of Dealer's Allotment

The headline "dealers get allotment to sell to April 30" was not in accord with interpretations of the freeze order made by the WPB. There is no time limit on the sales which retailers of refrigerators are permitted to make under the allotments set for them.

In another interpretation affecting "chain" dealerships—those operating a number of stores in one community—the WPB has ruled that the limitation on sales applies to the organization rather than to the individual outlets, which are not considered to be independent establishments.

This means that such chain dealerships are limited to sales of 100 units, or 1/2 of their total 1941 sales, whichever is greater, through their entire organization, without regard to the number of individual stores which it may comprise. This ruling, it is understood, also covers local operations of national chain-stores selling refrigerators, such as Sears and Montgomery Ward.

It was also officially stated last week that the order does not affect the production of replacement parts, which will continue unrestricted.

Refrigerators produced up to April 30 will be frozen and will aid in the building of a stockpile that will total approximately 750,000 units, which will be available only for essential civilian and military requirements.

AIR CONDITIONING & REFRIGERATION NEWS posed three major questions on the interpretation of the "freeze" order to the WPB, which were replied to by W. S. Hammersly, chief, Refrigeration and Air Conditioning Section, Electrical Products and Consumers' Durable Goods Branch, as follows:

Question 1: May dealers transfer part of their stock to other dealers without having such transfer count as a retail or wholesale sale?

Answer: "Dealers may not transfer stock to each other without specific instructions from the Director of Industry Operations."

Question 2: Can dealers complete sales and deliver refrigerators on which down payments were made prior to Feb. 14, without having such sales count in their allotment?

Answer: "Question No. 2 cannot be answered in a general statement. We must know the facts. However,

(Concluded on Page 16, Column 1)

BULLETIN!

Prevent Freon Shortage!

At the urgent request of the War Production Board, the News requests all subscribers who may have empty "Freon" cylinders in their possession to return them to Kinetic Chemicals, Inc., Carney's Point, New Jersey, BEFORE MARCH 10.

Present shortages of "Freon" make it imperative to squeeze all the production possible out of the Kinetic plant, according to War Production Board officials, but this will be impossible if a large quantity of cylinders are not returned at once.

If you want "Freon" later, return cylinders now. The situation has become SERIOUS.

Knowlson Sees Hope For Manufacture of 'Victory' Appliances

WASHINGTON, D. C.—The Federal government is not contemplating a complete "blackout" of consumers goods production, but is now studying plans for limited production of "victory models" of refrigerators, radios, vacuum cleaners, typewriters, and similar products when current stocks of such articles are exhausted, J. S. Knowlson, director of the WPB Division of Industry Operations, was quoted as saying at a press conference here last week.

He said that some "stockpiles" of products on which a suspension order has fallen might be sufficient for two years, after which plants manufacturing a "victory" model to meet minimum civilian needs probably would go into operation.

Mr. Knowlson warned that there was bound to be considerable disruption in the distribution of consumer goods, declaring that "it just isn't possible to make this transition from civilian to war production a comfortable proposition."

One of the big problems facing WPB on conversion of industries, said Mr. Knowlson, is the determination of what proportion of an industry's peacetime production should be maintained in order to prevent a breakdown in the civilian economy. Right now, he declared, the heads of all industry branches in WPB are conducting surveys and soon will be in a position to report not only on the potential wartime production of a given industry, but also on the minimum civilian production, if any, which should be maintained.

He said that in some instances his division was actually worrying about over-conversion of some industries.

Theodore C. Fedders Named President of Fedders Mfg. Co.

BUFFALO—Theodore C. Fedders, who started to work for Fedders Mfg. Co., Inc., while he was a boy of 15 in school, has been elected president and treasurer of the company to succeed his brother, Louis F. Fedders, whose death was reported in the Feb. 11 issue of the NEWS.

Mr. Fedders is a son of the late Theodore C. Fedders, founder of the business. Since 1936, he has been first vice president and general manager in charge of manufacturing and sales.

Faster News

Publishing Schedule of News Changed To Give Better, Quicker Coverage

BEGINNING next week, AIR CONDITIONING & REFRIGERATION NEWS will change over to a new, geared-to-the-times publishing schedule. Regular issues of the NEWS will appear every other week. As in the past, they will cover the industry thoroughly.

On the alternate weeks, news bulletins will be mailed to subscribers. These news bulletins will be largely devoted to the latest regulations, rulings, and interpretations emanating from Washington. Headline news of industry importance will also be published in these bulletins. This type of news will be elaborated and detailed in the following regular issue.

After this new publishing schedule goes into operation, AIR CONDITIONING & REFRIGERATION NEWS will be produced on the fastest publishing schedule in its history, to do the most important job in its history.

Each issue of the paper will carry news of developments in or affecting the industry for the entire week preceding, and the great majority of NEWS subscribers should receive the paper on Monday (providing proper postal cooperation is secured).

Besides supplying readers with later, hotter news, the new publishing schedule will permit increased editorial field contacts, and most important, will allow the editors to spend even more time in Washington—a point so vital to industry news-coverage at this time.

Subscribers to this paper in what one subscriber has termed "the best informed industry in the country" should receive even greater value for the \$4 they invest each year to receive the NEWS. The news will come to you faster, and the regular issues can be better balanced.

Most subscribers to AIR CONDITIONING & REFRIGERATION NEWS are now actively engaged in building or servicing equipment for the government. Most manufacturers in the industry are already producing either their regular equipment or special products for the armed forces. Many distributors, dealers, and contractors are actively selling refrigeration and air conditioning equipment to army cantonments, naval and air bases, and defense plants. Jobbers and service men are selling and installing parts and accessories for this equipment.

The NEWS will continue to report fully, interestingly, and informatively on the activities of these groups, will continue to show how those not now getting priorities business can climb on the train. Thus it will continue to serve the industry-at-war as it has served this billion-dollar field in peace time.

The NEWS has never been edited down to, or priced for, the small fry. Its high subscription price (none of which goes to solicitors) and its advanced editorial content have restricted its use to the bigger and most progressive operators in the industry—those who, we confidently believe, will survive the breakers ahead and still be in business when this war is over.

Collectively, NEWS subscribers are the cream of the crop—those financially strong enough, important enough in the industry and in their own communities to weather the storm. Personnel in these organizations, and some of the businesses themselves, will change. By continuing to supply vital news and information to those who need it, the NEWS expects to maintain its position as focal point for the industry.

Everything about this industry is changing so rapidly that the function of the industry's newspaper now becomes more important than ever; and within the limits of its means—even beyond its means—the NEWS will work overtime to fulfill its greater responsibilities.

Adequate Repair Parts Promised Radio Men

NEW YORK CITY—"The government will take care to assure an adequate supply of repair and maintenance parts," Sydney Hogerton, director of the regional office of the Priorities Field Service, told a group of radio manufacturers here.

He indicated that completion on a considerable number of radio sets for civilian use will be permitted.

In This Issue—Electric Range Specifications

Presented on pages 8 through 13 is a tabulation of comparative specifications of current models of electric ranges now being offered by 19 U. S. manufacturers, covering pertinent data regarding surface unit and oven heats, construction, insulation material and thickness, hardware, accessory equipment, etc.

BULLETIN!

'Commercial' Is Made Separate Branch of WPB

Big Units No Longer In Consumer Goods Branch; Fernald To Head It

WASHINGTON, D. C., March 2—The commercial and industrial refrigeration and air conditioning industry will soon become a new and separate and distinct branch of the Division of Industry Operations of the War Production Board, and will be under the direction of J. M. Fernald, formerly general manager of the Baker Ice Machine Co., according to authoritative information made known here today.

Formerly the commercial refrigeration and air conditioning field had been considered in WPB circles as the refrigeration and air conditioning section of the Electrical Products and Consumers' Durable Goods Branch of the WPB.

It is thought that as a new and separate section of the Division of Industry Operations, the commercial refrigeration industry will not fall within the scope of the Consumers' Durable Goods branch. This gives greater strength to the predictions that no "all out" conversion to an armament manufacturing program is contemplated for commercial refrigeration, such as is steadily being required of the industries that have come under the Consumers' Durable Goods branch.

Laundry Quotas Are Extended To Mar. 15

WASHINGTON, D. C.—February quotas for the manufacture of domestic laundry equipment were extended for the first half of March in an order issued Feb. 25 by the War Production Board, the quotas ranging from 60 to 95% of the average monthly sales for the 12 months ending June 30, 1941, depending on the size of the plant.

Under the order the same rate of production is permitted for the first half of March, the number being half of the February quotas because it covers only half of March.

Before March 15 the War Production Board will meet with representatives.

(Concluded on Page 16, Column 4)

Priorities Setup Forcing Firms To Use of PRP

NEW YORK CITY—The priorities system as it is operating today is virtually forcing manufacturers to operate under the Production Requirements Plan, declared Stanley Oppenheim, consulting analyst for the Priorities Field Service in addressing a group of radio manufacturers here last week.

To illustrate, Mr. Oppenheim

Breech Named President Of Bendix Aviation

NEW YORK CITY—Ernest R. Breech has resigned as vice president of the General Motors Corp. in charge of household appliances and aviation to become president of Bendix Aviation Corp., succeeding Vincent Bendix, who becomes chairman of the board.

Refrigeration Priorities Business Bound To Increase as War Effort Expands

New 'Cold' Annealing Unit Self-Contained

ST. LOUIS—Among the recently unusual direct applications of refrigeration called up by the demands for speed and perfection in the construction and assembly of modern weapons of war is the automatic

annealing of rivets used in aircraft assembly.

The refrigerated annealing machine manufactured by the Hussmann-Ligonier Co., illustrated above, is used to anneal automatically, by electric refrigeration, the rivets used in airplane assembly.

Control of temperature within the close limits demanded is accomplished by the Penn model 1260P3 lowside pressure unit, controlling the operation of the condensing unit.

U. S. Announces Locations Of 7 Training Camps

WASHINGTON, D. C.—Names for seven U. S. Army training camps have been announced by the War Department. Camps designated and their locations are as follows:

Camp White, Medford, Ore.; Camp Atterbury, Columbus, Ind.; Camp Gruber, Cookson Hills, Okla.; Camp Butner, Durham, N. C.; Camp Carson, Colorado Springs, Colo.; Camp Campbell, Clarksville, Tenn., extending into Kentucky; and Camp Hood, Killeen, Tex.

Penn Switch Re-locates Chicago Offices

CHICAGO—Penn Electric Switch Co.'s Chicago office has moved from 844 Rush St., to 520 N. Michigan Ave. Telephone numbers remain unchanged.

Knight Points Out Growth of Jobs In Use By Army, Navy

CHICAGO—"The Army and Navy and their various subdivisions have and are purchasing millions of dollars worth of mechanical refrigeration equipment, and the smart refrigeration dealer and contractor is familiarizing himself with the Army purchasing and maintenance procedure to get himself a share of this A-1 priority business when the opportunity comes along," declares M. W. Knight, assistant to the president, Peerless of America, Inc.

"It has been demonstrated to me that some local dealers and contractors have been getting some of this business," says Mr. Knight. "This has been true where an increase has been made over the original facilities in some of the cantonments. Also, many of the installations in U.S.O. buildings throughout the country have been equipped by dealers.

"In buying refrigeration equipment the government has apparently been working on the theory of buying the equipment and forgetting about it. However, it is obvious that some maintenance work will have to be done, and this offers opportunities for local contractors."

The government has purchased large quantities of commercial refrigeration equipment direct from manufacturers and will soon buy more, with the expanded training program that is coming up.

"There are on the docket today plans to purchase equipment for at least 28 new cantonments within the next year," Mr. Knight explained. "It is probable that each one of these cantonments will use at least \$35,000 worth of equipment."

"There are many health centers being constructed which will contain refrigeration, and aviation schools have been active purchasers of refrigeration equipment."

"The navy is buying several hundred small sized air conditioning units and all types of refrigeration storehouse equipment and portable refrigeration units."

Mr. Knight calls attention to the more than 12,000 65-cu. ft. reach-in refrigerators (of the type shown in the illustrations) that were converted from ice refrigeration to mechanical refrigeration. These units are installed in the mess halls of the various cantonments in the U. S.

For the refrigerators illustrated in the accompanying photographs, a 1/2-hp. International Harvester air cooled condensing unit was used (a variety of makes of equipment went into these jobs). The temperature maintained in these boxes is 38°-40° F. Refrigeration in these particular boxes is obtained through the use of a special D-40 dome evaporator.

The space formerly occupied by ice is now added storage space for produce. The condensing unit is installed off the floor and is completely protected by a wire mesh enclosure.

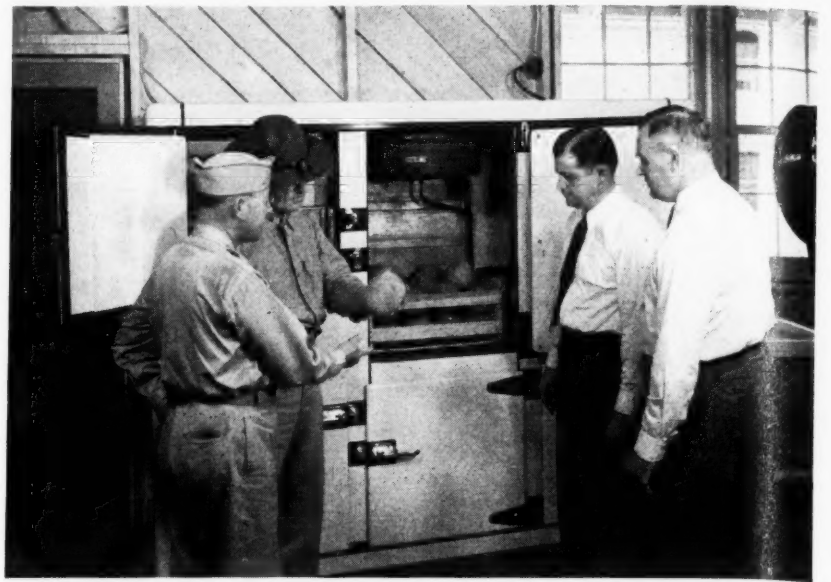
Distributor Making Ammunition Boxes

DETROIT — Refrigeration Sales Corp., a distributor of commercial refrigerator equipment and units in this territory, has secured a prime government contract for the manufacture of ammunition boxes.

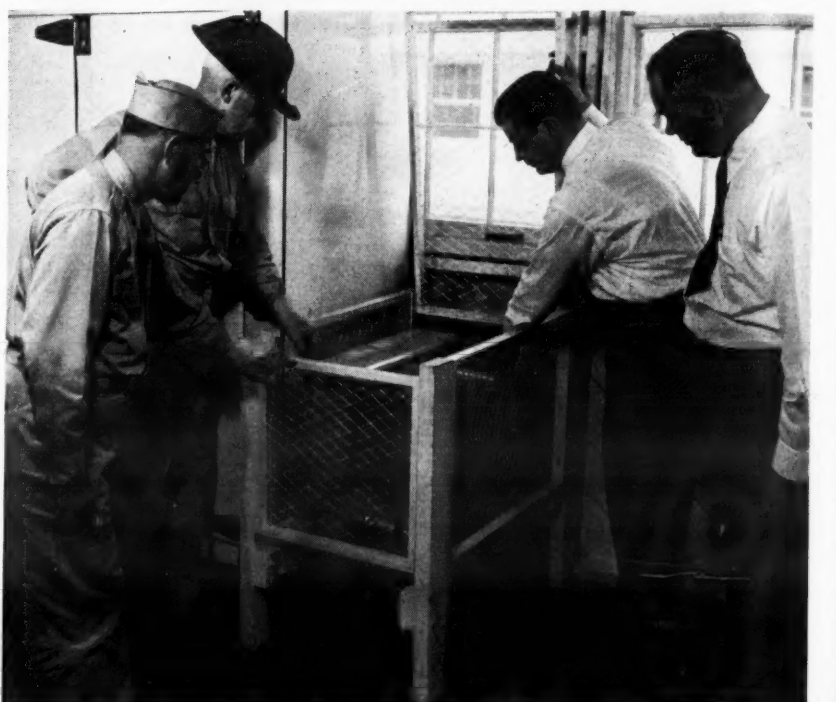
In its operations as a distributor of commercial refrigeration the firm has established a fixture fabricating department of fair-sized proportions, so that its adaptation to the manufacture of ammunition boxes was fairly simple.

"We had been reading about the trends for the industry as a subscriber to REFRIGERATION NEWS, and from this and other evidences it was obvious that there was to be some curtailment of our business, so we set about for a way to fill out our own operations."

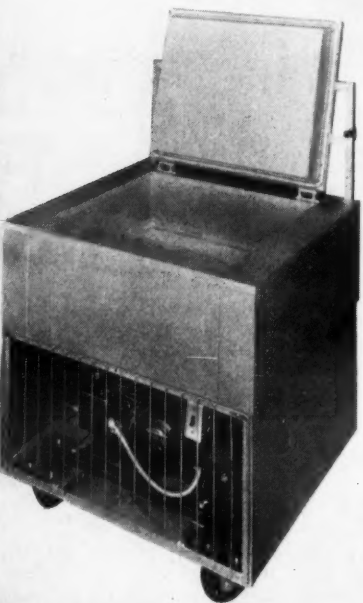
"We checked into the various government contracts that were open and bid on one that we thought we could do. It turned out that we had the low bid so we got the job—and that's about all there was to it."



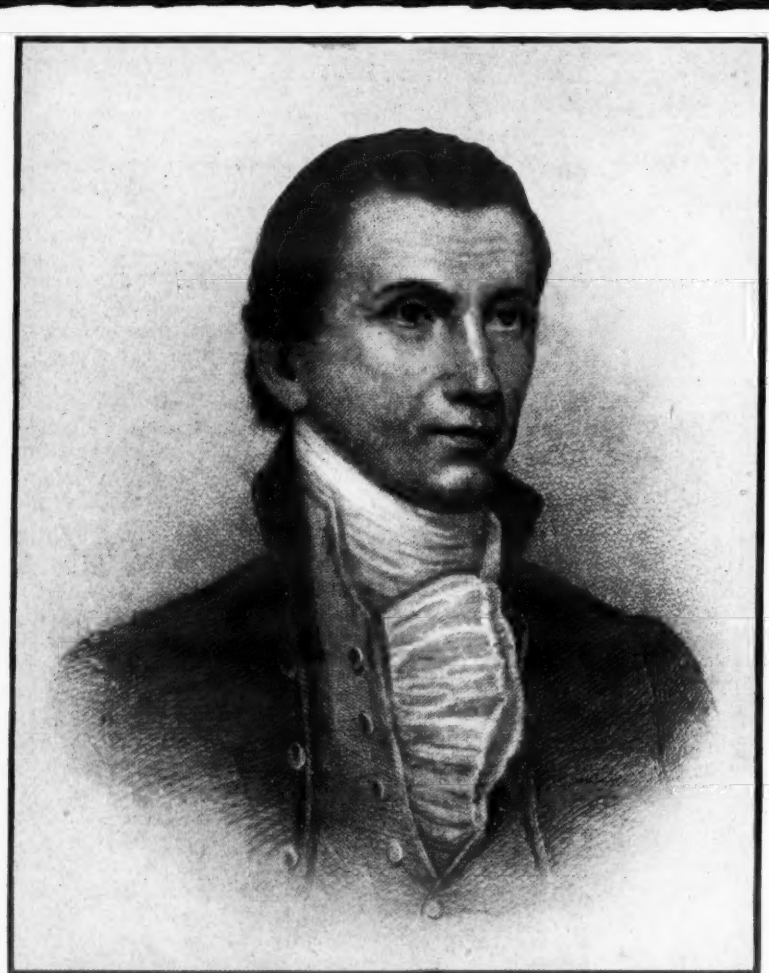
Lieut. Com. D. H. Finley, post quartermaster of Camp Meade (right) and Capt. D. W. Caven check a chilled melon taken from one of the refrigerators in the camp as E. B. Derr, assistant sales manager of the International Harvester Co. refrigeration department, and another company representative, look on. Note storage space where ice was once kept.



Mechanical refrigeration unit operates right alongside the refrigerator.



Automatic annealing machine.



President James Monroe—his annual message Dec. 2, 1823, embodied the principles later known as The Monroe Doctrine. It protested future European colonization in America and the extension of foreign systems in this hemisphere.

VIRGINIA—a name that has earned respect

The fundamentals of American Foreign Policy, as they affect the nations of this hemisphere and their relations with Europe and Asia, find expression today in President Roosevelt's Good Neighbor Policy, and were first embodied in The Monroe Doctrine. The principles of The Monroe Doctrine were the contribution of two great Virginians, Thomas Jefferson and James Monroe.

The Virginia Smelting Company, too, has a long established "good neighbor" policy of its own. That policy, and the Company's successful growth and position in the industry today, trace directly to one belief:

"Nothing will benefit this Company that does not benefit the entire Industry."



"VIRGINIA" REFRIGERANTS
AGENTS FOR KINETIC'S "FREON-12"

VIRGINIA SMELTING CO.
WEST NORFOLK, VIRGINIA



YOU CAN'T DENY IT!
—a
BETTER DRYING
AGENT does a
BETTER JOB!



That's logic. And—with your 1942 responsibility—you can't afford to use a drying agent that hasn't proved its superiority! Davison's Silica Gel has won its position as the industry's preferred drying agent on this one point—IT DOES A BETTER JOB! Service engineers and manufacturers alike say that Silica Gel's capacity, speed, acid removal and freedom from dusting is helping them keep America's refrigerators running—has helped them eliminate the break-downs caused by moisture.

If you've never used Silica Gel, you have an experience coming to you. Try it and see for yourself how it fits in with your plans to do your part in Civilian Defense.

Your Jobber stocks Silica Gel charged dehydrators and Silica Gel in bulk.

✓
KEEP 'EM
RUNNING

WITH
DAVISON'S
SILICA GEL

DAVISON'S
SILICA GEL
MOISTURE'S MASTER

THE DAVISON CHEMICAL CORPORATION
SILICA GEL DEPARTMENT
BALTIMORE, MARYLAND

American Coils Develops Special Test Unit And an Oil Chiller For Industrial Plants

NEWARK, N. J.—Two new products which may prove helpful to refrigeration dealers in broadening their sales field during present conditions have been developed by American Coils, Inc. here.

First of these is the Amcoil "Minus 50" test cabinet, using dry ice; the second is a circulating oil chiller using mechanical refrigeration. Both of these units are used in defense plants, the test cabinet for testing products used in planes or other equipment which may be used under low temperature conditions, and the oil chiller for cooling the

cutting, quenching, or grinding oils on automatic production machines such as are used today.

The test cabinet has a fan motor mounted on its top, so that it is not affected by cooling chamber temperatures. Dry ice is loaded from the top, and capacity of the cabinet is 50 pounds. Temperatures as low as -50° C. can be obtained and held in the cabinet, it is claimed. Spy door has five heavy plate glass thicknesses, and the entire cabinet has 6 inches of glass-wool insulation.

Storage capacity of the cabinet is 6.09 cu. ft.

Westinghouse Develops a Plan For Improving Dealers' 'Appliance Service'

MANSFIELD, Ohio—The fact that profitable dealer service of electrical appliances is one "product" upon which war has not placed limitations has been the principal guide in formulating the 1942 service program of the Westinghouse merchandising division, reports L. K. Baxter, service manager.

"Good service is regarded as an essential stock-in-trade for appliance dealers," Mr. Baxter said. "Especially now, service may be the life-saver for many dealers, with curtailments on the production and sale of new products. Service kept some dealers in business in the last war; the same will be true during this war. Conservation and efficiency in American homes are national keynotes, declared by our government to be essential to the war effort. Service for existing electrical appliances, therefore, is more important now than ever before."

Westinghouse has planned its 1942 service program with a definite "product" slant. Service is treated as an activity which a dealer may freely merchandise and sell, giving free play to his own ingenuity and energy.

Chief dealer-helps in the program are:

1. Full local promotion campaign, including store displays, suggested direct-mail solicitation of service business, and consumer literature.
2. Identification, including special service signs for dealer stores, decalcomania panels.

3. "The Service Beacon," illustrated magazine written and edited for dealer employees engaged in servicing appliances; goes out periodically to every Westinghouse service man.

4. New sound-slide film, "Can You Make It Better," portraying the need for precise service habits—in receiving calls for service from appliance users, in answering calls, in the conduct of service calls in customers' homes. The film is being shown to Westinghouse service men throughout the country.

5. Schools for dealers and service men, conducted by service supervisors and distributors' service supervisors.

6. Pocket-size "quick-check guide" for service men, a handy reference of procedure in examining appliances to ascertain the cause of complaint.

7. Qualified service men's club, an organization of service men to focus their attention on the importance of conscientious service efforts to themselves and their firms.

"In this program, Westinghouse has outlined full specifications of what seems to be the one thing which dealers can sell to the hilt—their service facilities," Mr. Baxter said. "We have backed these specifications with promotional material, an identification program, advertising and training, and educational efforts. Headquarters and field organizations have been expanded to help dealers accomplish real strides in the service business."

Sales Setup Announced For 'Frostrade' Refrigerated Welding Machines

DETROIT—"Frostrade" units, the new type of refrigerating units for welding machines, are now being manufactured and marketed to welding equipment manufacturers by Weltronic Corp., 3080 East Outer Drive here, following its acquisition of all patent, manufacturing, and sales rights to the new units originally developed by Progressive Welder Co., Weltronic's new Frostrade division disclosed.

Sales of the "Frostrade" units to users will be handled by manufacturers of welding equipment and the York Ice Machinery Co., while installations will be supervised by Weltronic Corp., York Ice Machinery Co., or the welding equipment manufacturers.

Developed primarily for those tough welding jobs where water-cooling has proven inadequate, such as in the welding of aluminum or heavy steel sections, the "Frostrade" process makes possible a material reduction in operating costs for resistance welding equipment of all types, according to its manufacturer.

"Frostrade" units make practical continuous welding of four to ten times as many spots in aluminum without requiring point dressing. Aluminum is one of the most critical metals to weld because of the low electrical resistance and high current values required, with the resulting inclinations towards alloying of the metal with the electrode because of the high heat generated.

In the welding of heavy steel sec-

tions the long weld time and high point pressure required result in high surface heat with consequent mushrooming of electrodes, short electrode life, faulty spots, and frequent and protracted down time for the machines.

In both cases the "Frostrade" cooling process removes this heat as it is generated, decreasing pick-up of the aluminum and the heat-induced mushrooming of the electrodes. These units materially reduce water consumption since water is used only "as required" to maintain brine temperature, the company stated.

Weltronic has announced that its new "Frostrade" units are available in five standard sizes, ranging in their capacity from light steel spot welding for the small unit to the largest unit for use with either a heavy steel welder or a bank of eight aluminum welders. Completely self-contained, the refrigerating units are simple to install.

When used in connection with a spot welding machine, the refrigerating units reduce electrode temperature to a point where electrodes will be continuously covered with frost in spite of the high heat necessary to produce a weld. As a result the life of the point is so increased that 10-minute runs, at 100 welds a minute, on aluminum without point dressing are not unusual—even on tough jobs.

All types of Weltronic "Frostrade" units are provided with automatic thermostatic control, built-in dehy-

drator, heat exchanger, external indicating thermometer, highest efficiency pump with variable pressure, and all standard safety appliances.

Repair—Don't Replace Is Gov't Hint To Plumbers

WASHINGTON, D. C.—"Plumbing contractors, instead of supplying new and shiny plumbing fixtures as they have done in the past, would be making a distinct contribution to the war effort to suggest repairs," declared W. W. Timmis, chief of the WPB Plumbing and Heating Branch in an appeal addressed to plumbing contractors.

"The outside finish of a unit need not be new, as long as the inside working parts are in good condition," he stated. "In this way, each and every individual can assist in the prosecution and in the winning of the war."

He further pointed out that the demand for plumbing equipment far exceeds the available supply.

Minneapolis Dealers Elect New Officers

MINNEAPOLIS—George H. Johnson was elected president of the Minneapolis Electric Appliance Dealers organization for 1942 at the group's recent annual meeting. C. B. Annis was named vice president, W. G. Stuafer, secretary-treasurer, and William Ritt, manager.

Directors elected were E. C. Beecher, R. H. Gustafson, Riley Whitmore, and Earle Williams.

"Food is a Whole Arsenal of Weapons"

...and it must not be sabotaged! From the vast and fertile acres of America must come the greatest production of food in history to serve our people at war.

Before it reaches the fighting men who will hammer out the victory... the workers who provide the arms... and civilians' families here and among the United Nations, a great proportion of that food requires refrigeration to keep it wholesome, to prevent its loss through spoilage.

So, Secretary of Agriculture Wickard headlined the vital service of commercial refrigeration when he put food near the top of the list in democracy's arsenal of weapons. Refrigeration on trucks, trains and ships, in warehouses, stores and markets, must be on guard, day and night, to prevent sabotage to our food supply by waste and spoilage.

Through years of peace, Penn has supplied a complete line of automatic controls which by their efficiency, dependability and adaptability



have won a place of outstanding leadership for this company in the commercial refrigeration industry.

We recognize the responsibility of such leadership during the emergency of war. Our resources, naturally, must be devoted first to the direct requirements of the fighting forces. But, we shall do our utmost to supply Penn refrigeration controls to manufacturers and service men, and with the least possible delay. Penn Electric Switch Co., Gosben, Ind.



REFRIGERATION, AIR CONDITIONING, ENGINE,

HEATING, PUMPING AND AIR COMPRESSOR

Tire and Tube Quotas Larger For March But Retread Rationing Lags

WASHINGTON, D. C.—March tire and tube quotas substantially larger than those provided for rationing to eligible vehicles in the preceding month were made public last week by Price Administrator Leon Henderson.

For List A passenger cars, light trucks, and motorcycles, the March quotas provide a total of 104,701 new tires and 87,635 new tubes, against 80,784 new tires and 67,616 new tubes for these vehicles in February. The March quotas for List A trucks, buses, farm equipment, and other heavy vehicles total 256,385 new tires and 288,149 new tubes compared with 156,029 new tires and 267,562 new tubes in the previous month.

Retreaded and recapped tires available for rationing in March to eligible trucks, buses, farm equipment, and other heavy vehicles aggregate 110,225. There is no fair comparison of this figure with February, since rationing of truck retreads did not begin until the 19th of that month and the first quota covered only nine days.

No retreaded passenger car tires will be available for rationing in March, since the War Production Board has not authorized the manufacture of passenger car camelback during that month. This means that only new passenger car tires and tubes will be rationed during March and their sale will be restricted to vehicles on List A of the eligibility classifications.

Hence, for another month, at least, no passenger car on List B of the eligibility classifications will be able to get a retreaded tire. However, trucks qualifying under List B can apply for retreaded or recapped tires between March 1 and March 20.

Hurley Given Permission To Make Repair Parts

WASHINGTON, D. C.—Suspension Order S-11, issued against the Hurley Machine division of the Electric Household Utilities Corp., Chicago, has been amended to permit the company to make deliveries of spare parts required for repairs to its electric washing machines and electric ironing machines, now in the hands of its customers.

The company has requested that the Suspension Order, which prohibits all transfers and deliveries of electric washing and ironing machines, and spare parts for them, until Aug. 1, 1942, be stayed. The War Production Board, however, saw no reason to invalidate the order, which had been imposed after investigation disclosed that the company had exceeded the production quota permitted it under Limitation Orders L-6 and L-6-a.

The amendment means that owners of the company's products will not suffer because of the penalties imposed upon the manufacturer, says the WPB.

Hainsworth To Address Detroit ASRE Group

DETROIT—Dr. William R. Hainsworth, vice president, Servel, Inc., and national president of the American Society of Refrigerating Engineers, will speak at a meeting March 11 of the Detroit section of A.S.R.E. Dinner and the meeting will be at the Rackham Foundation.

Dr. Hainsworth will speak on "Gas Fired Air Conditioning." Prof. A. L. Hesselschwerdt of Wayne university, vice chairman of the Detroit section, will give a demonstration and talk on "Calorimetry and Its Importance to the Refrigeration Industry."

Priorities Information

Priorities Regulation No. 3

Effective Date for Using PD-1A & PD-3A Forms Changed to March 15 by New Order

WASHINGTON, D. C.—The date on which PD-1A and PD-3A forms must be used in place of forms PD-1, PD-3, PD-4, and PD-5 has been postponed from March 2 to March 15 by Amendment No. 1 of Priorities Regulation No. 3, issued Feb. 25 by the Director of Industry Operations.

Other changes in Priorities Regulation No. 3 are as follows:

The Selective Service System has been added to the list of agencies by which PD-3A's will be issued. In conformity with procedure already established, the use of PD-3A certificates by the Procurement Division of the Treasury and by the Surplus Marketing Division of the Department of Agriculture has been specifically confined to Lend-Lease contracts. PD-1A certificates may also be used to rate purchases under Lend-Lease contracts or purchases by or for the account of foreign governments.

An addition to paragraph (a) provides that after March 15 preference ratings which have been assigned prior to that date on PD-3, PD-4, and PD-5 certificates must be extended in conformity with the provisions applicable to PD-3A.

Another new paragraph, (e) (5), provides that the extension of preference ratings assigned by PD-3A certificates may be subjected to such further provisions as may be prescribed by Supply Arms or Bureaus of the Army or Navy, with the approval of the Army and Navy Munitions Board and the Director of Industry Operations.

Additional Benefits Are Given PD-1A Users Under Order No. 3

DETROIT—For those who use Form PD-1A to get preference rating certificates, there are certain provisions in Priorities Regulation No. 3 and its interpretations which should be studied so that suppliers will obtain the maximum benefits from the use of the PD-1A forms. (Copies of Priorities Regulation No. 3 and its

attendant interpretations should be obtainable from your local priorities office.)

Priorities Regulation No. 3 allows the recipient of an individual rating, his suppliers and sub-suppliers, to employ the rating for replacement in inventory of materials used in filling the rated order, provided such replacement does not increase inventories above a practicable working minimum.

If the materials to be replaced are manufactured, processed, or otherwise physically changed by the supplier, the rating must be extended while the materials are in process of fabrication. For materials which are not processed or otherwise changed by the supplier, extension of the rating may be deferred up to three months, until an order can be placed for the minimum quantity procurable on customary terms. This provision is primarily for the benefit of wholesalers and distributors, enabling them to group their own orders while making deliveries in small quantities.

This regulation also allows a supplier or sub-supplier who has received two or more purchase orders bearing ratings of the same grade to include in a single purchase order or "basket," within the limitations which have been indicated above, any or all of the material which he requires to make deliveries in accordance with the rated purchase orders which have been served upon him. In such cases, he must specify in the certification on his own purchase order all of the Preference Rating Certificate form numbers and serial numbers referring to the orders in connection with which he is extending the ratings.

Questions and Answers—

Interpretations Help Clarify Questions Regarding Use of PD-1A & PD-3A Forms

WASHINGTON, D. C.—Questions and answers to clarify the use of PD-1A applications and PD-3A certificates for individual preference ratings have just been released by the Division of Industry Operations, WPB.

PD-1A is to be the standard form for individual applications for priority assistance and PD-3A is the form on which individual ratings are assigned by Army, Navy, and other Government officials. The use of these forms has been optional since Feb. 2 and will become mandatory on and after March 15.

When do I use the PD-1A application blank?

An application may be made on a PD-1A form for a priority rating to obtain any material or supplies which you cannot obtain without a rating or by use of any rating to which you are already entitled.

SEPARATE APPLICATIONS

Do I have to make out a separate application for every order to be placed with each of my suppliers?

Only when you are ordering different kinds of supplies or supplies to be used for different purposes. If you are assigned a rating to cover 100 tons of steel which is all to be used for the same purpose, you may use the rating on orders for 50 tons from one company, 25 tons from each of two others, etc. You may not use it, however, to obtain a larger total quantity than the amount approved on the certificate. If you need 50 tons of steel for one product and an additional 50 tons for another product, you must make out two separate applications.

What do I do with the PD-1A form when it is returned to me with a rating assigned by the Bureau of Priorities?

Keep the approved form in your file and apply the rating by endorsement of your purchase order. You do not need to send either the original or a copy to your suppliers as you did with the old PD-1 forms.

HIGHER RATING

May a PD-1A form be used to apply for a higher rating when the rating assigned by a blanket order or a previously issued certificate is not high enough to secure delivery of the materials required?

Yes, provided you accompany it with evidence that you have made every possible effort to obtain the material with the rating originally assigned.

Who may issue ratings on PD-3A forms?

The Army or Navy official who signs the purchase contract assigns appropriate ratings on a PD-3A form or a rating may be assigned by other authorized Army and Navy officials. Designated officials of the Maritime Commission and certain other specified government agencies and foreign governments may also issue PD-3A certificates.

Is the Army or Navy required to give me a PD-3A certificate when they place an order with me?

No. Preference ratings are not usually assigned to certain classes of materials, and the Army and Navy may refuse to assign ratings when they consider the assignments unwise.

USES OF PD-3A

Will preference ratings be granted on Form PD-3A for materials not listed on the Army and Navy Priorities Critical List?

Yes. The Army and Navy Priorities Critical List has been abolished as a limiting factor for the issuing of preference ratings by field officers.

May PD-3A be used for repair, maintenance, and operating supplies?

Yes, if you are a prime contractor for the Army or Navy or a sub-contractor whose dollar volume of orders on hand is 50% or more in Army or Navy contracts. Sub-contractors will not be permitted to use PD-3A's for repair, maintenance, and operating supplies after June 1, 1942. If you are a subcontractor, it would be best for you to apply for preference ratings under the Production Requirements Plan.

Must the endorsement by which I extend PD-1A and PD-3A be on the actual purchase order?

It must be sent as a part of the purchase order, but a separate form may be printed and attached to the purchase order to carry the properly signed endorsement.

May I extend a PD-3 which I have received, by the procedure described for PD-3A?

After March 15, previously issued PD-3's must be extended by the procedure described for PD-3A. Until March 15, PD-3 should be extended only by the PD-3 procedure unless the cost of material to be processed is under \$500, in which case extension by endorsement has been authorized.

EXTENSION PROCEDURE

May I extend a PD-1 by the procedure which has been described for PD-1A?

No.

May I extend a rating received on a PD-1A certificate and a PD-3A certificate on the same purchase order?

Yes. Any number of PD-1A and PD-3A certificates carrying the same rating may be extended on the same purchase order.

Under what circumstances may I extend ratings assigned on PD-1A and PD-3A forms to replace material in inventory?

A rating may not be extended to replace materials in inventory if such extension would raise your inventory above a practicable working minimum.

If you fabricate or change the material in any way, you must extend the rating while the rated order is being filled.

If you are a supplier or distributor who does not fabricate or change the material to be delivered on a rated order, you may accumulate ratings for any one kind of material up to a maximum period of three months so that you can place a single order for the minimum quantity procurable on ordinary commercial terms. You are not permitted to apply a rating in anticipation of receiving rated orders.

When a preference rating assigned on a PD-3A is extended, is it necessary to submit a copy of the purchase order on which the extension is made to any other person?

Yes. One copy of the purchase order is to be sent to the officer indicated on the PD-3A certificate, generally the officer who signed the certification section of the form.

When I extend a rating received on a PD-1A certificate, must I send a copy of the purchase order on which the extension is made to Washington?

No. The original purchase order is sent to the supplier and a copy must be kept in your files. No other copies are necessary.

PRACTICAL MINIMUM

What is a practical working minimum?

A practical working minimum means the smallest inventory which will enable you to keep your production processes operating efficiently. Unless the circumstances are exceptional, this should not be more than a three months supply, or more than the amount of inventory you had on hand a year ago. In the case of certain scarce materials, maximum permissible inventory has been specifically prescribed by the War Production Board.

What is meant by a single kind of material for which a separate PD-1A application must be filed?

Materials included on a single PD-1A application must fall into one common class such as steel, paper, etc. One application may cover several sizes and shapes of steel products, or several items of any other single type or material.

What is meant by a single need or use for which a separate PD-1A application must be filed?

A single need is for a specific quantity of materials to be used in making one product or class of products. A single use is for one or more items of equipment or supplies to be used for a single purpose as described in the application.

MANPOWER AND MATERIALS KEYS TO NATIONAL DEFENSE —they must be conserved—

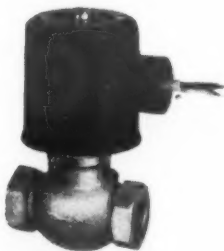
Defense requirements must come first. Demands are heavy—will be heavier—and they must be met. Hence, it is a patriotic duty to conserve manpower and materials—the twin keys to National Defense.

In laying out refrigeration and air conditioning installations, it is necessary to consider these factors. As the army grows—capable service men will be fewer—the answer is equipment that requires minimum service. If equipment is ineffective and has to be replaced, added and unnecessary loads are thrown on production machines needed for turning out military supplies. Additional materials must be used which may be needed elsewhere. Select equipment that won't have to be replaced.

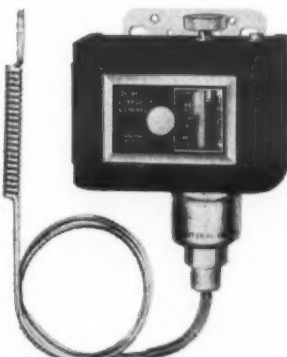
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When Westinghouse Men Met



When members of the Westinghouse merchandising division met earlier this year in Mansfield both the household and commercial refrigeration field representatives conferred on their plans for the coming year. In this group (left to right) are H. F. Hildreth, sales development manager,

air conditioning and refrigeration department; M. C. Turpin, Washington, D. C. merchandise supervisor; W. R. Mason, merchandise advertising and sales promotion department; and L. W. Clifford, commercial refrigeration section.



A group of headquarters officials and district managers of Westinghouse form this "family picture." Front row (left to right) are J. E. Hugo, Mansfield, central manager; N. L. Myers, New York City, eastern manager; Frank R. Kohnstamm, general sales manager; C. E. Reid, St. Louis, southwestern manager; E. M. Binns, Philadelphia, middle Atlantic man-

ager; and W. B. Creech, Atlanta, southeastern manager. Back row (left to right) are J. F. O'Donnell, San Francisco, assistant sales manager in charge of the Pacific Coast; C. H. Guy and Reese Mills, assistant sales managers stationed at Mansfield; and S. M. Davison, Chicago, northwestern manager.

Drive-In Restaurant With Big Volume of Soft Drinks Finds Pre-Cooler a 'Necessity'

BIRMINGHAM, Ala. — A "pre-cooler" storage room in which bottled beverages and milk can be brought down to a temperature of 40° F. before moving on into two 9-foot service bottle cases is an outstanding feature of the new Thomas Drive-In Restaurant here.

The new restaurant is a combination of drive-in and table service, seating 50 in a front dining room, and accommodating 70 automobiles in 77,000 square feet of parking space around the building. Owner W. E. Thomas, who designed the new institution, planned the addition of the dining room to appeal to the customer who wants to enjoy dinner at a table, yet demands convenient parking space as well as good food. Part of the lot surrounding is sectioned for diner parking, while food service is extended by 30 carhop girls to drive-in patrons.

Because approximately 33% of all sales involved either bottled soft drinks or beer, Mr. Thomas has planned unusual equipment facilities to insure an ample supply at the proper temperature. Whereas in standard bottle-cooling methods soft drinks are unloaded from trucks in cases and sorted immediately into the bottle coolers from whence they are served, those at the Thomas Drive-In are cooled several hours, usually overnight, in a 16 x 6 x 9-foot "pre-cooler" room which opens directly upon a truck dock at the left side of the building. Cases of bottled drinks are unloaded directly into the pre-cooler room instead of going into the kitchen service bottle coolers, where their warmth not only puts a strain on refrigerating equipment, but also tends to increase the temperature of already cooled stock on hand.

The pre-cooler room is automatically kept at between 40 and 45° F. by a G-E "gun cooler" which circulates chilled air through the room. Walls are concrete, overlaid with 2 inches of Dry-Zero insulation, and pine boards, sealing it tightly against

heat load. Capacity for 60 average cases is provided. From four to six hours will cool an entire room stock, allowing the restaurant to switch the ready cooled bottles directly to the service coolers without interfering with their temperature. A separate compressor is installed for the pre-cooler room.

The restaurant has a 12-stool fountain, and electric kitchen equipment, including dishwasher, potato peeler, French fryer, grille, toasters, etc. Individual compressors are used for the service bottle coolers, meat storage cooler, and a small kitchen refrigerator.

Packer of 'Baby Foods' Adds Storage Room For Raw Materials

CANAJOHARIE, N. Y. — A special storage room has been erected in the new Beech-Nut Packing Co. plant here for storage of vegetables intended for use in manufacturing strained and chopped Beech-Nut baby foods. The new cooler supplements previously erected coolers, among which is a room for cooling liver used in beef-and-liver soup for infants.

Preparation of baby foods requires that only best-grade vegetables be used, and that these be in the best possible condition when processed for canning, so that proper cooling and storage facilities are of more than ordinary importance to manufacturers of such products.

Walls of the cold room are insulated with one 2-inch and one 3-inch layer of Armstrong's corkboard, while two layers of 3-inch corkboard guard the ceiling. Corkboard also is used in the floor slab. Metal clad cold storage doors were built by Jamison Cold Storage Door Co.

What to Check When Electric Motor Does Not Start

Motor Troubles & Their Correction

Editor's Note: Following material is part of a section in the series of articles on motors written by R. A. Fuller of General Electric Co.'s industrial engineering department—a section on service.

By R. A. Fuller,
Industrial Engineering Dept.,
General Electric Co.

Complaint - -

B. Motor Does Not Start

5. Loose Connection

"Loose connection" can occur in the wiring, in the controls, or in the motor windings. Open circuits in the stator and rotor windings of the motor are covered elsewhere. A loose connection in the wiring or controls can be located by a test lamp as covered in the section on "No voltage at the Motor Terminals."

A loose connection may make good contact, when the terminal of the test lamp lead is pressed on it, and make poor contact when this pressure is removed. A connection may test satisfactorily with the test lamp and still have enough resistance to

cause excessive loss of voltage when the motor is attempting to start. It is well, therefore, to tighten all terminal nuts and screws and check other joints in the wiring to see if they feel loose.

6. Winding Is Burnt Out

"Winding is burnt out" is a complaint that usually is accompanied by obvious indications such as the sharp, distinctive odor of burnt insulation and a roasted out appearance of the winding. A rewinding job is almost invariably required and this should be done by a qualified motor repair shop.

A slight amount of smoking of a motor may not seriously damage it. In cases where the customer has shut the equipment down fairly soon after it started smoking, the service man's problem may simply be to locate the cause of the overheating, correct it, and restart the equipment.

When only part of a winding has been burnt out it may sometimes be possible to operate the motor on an emergency basis. Such operation is covered in the sections on open circuits and short circuits in the stator and rotor windings. Note particularly that a roasted out coil will very probably be short circuited and, if so, it must be cut completely in two as covered in Section A6 on

"Short Circuit in the Stator Winding." Failure to do this will result in excessive heat being generated in the short circuited coil.

7. Motor Bearings Are Frozen

"Motor bearings are frozen" so tightly to the shaft that the motor does not have power enough to overcome the bearing and load friction. This trouble will, of course, occur only unusually on sleeve bearings. It can readily be checked by removing the belts and attempting to rotate the motor by hand. The use of a pipe wrench on the shaft extension, or any other means of getting leverage to break the motor loose, is hazardous as it will quite possibly cause a bent shaft. If it is found possible to break it loose in some such way the bearing should be kept well supplied with oil and the motor turned over slowly for some time. Then run it with the belts off for fifteen to thirty minutes to make sure that it does not overheat when operating without load. Then replace the belts, checking the belt tension carefully to make sure that it is not excessive, and watch the operation for another half hour or more.

It is advisable to always take the motor apart and inspect both the shaft and bearing surfaces for damage. Scored shafts should be replaced or turned down—preferably replaced to avoid the necessity of matching the new diameter of the turned down shaft with that of the bearing. Damaged bearing sleeves should be replaced. Bent shafts can sometimes be straightened by a competent motor repair man.

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Dependable
Power

On War Industries'
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Look to CENTURY MOTORS

They provide these advantages:

1. High starting torque necessary to handle modern compressors under unusual conditions.
2. Quiet starting, quiet acceleration, and quiet running at all times.
3. Unusual freedom from electrical and mechanical vibration.
4. Century's unique bearing bumpers reduce chatter from V-belt irregularities.
5. Cushion base mountings isolate possible vibration from your installation (3 horsepower and smaller).

Selection of the proper Century Motor is an easy matter because of Century's extremely wide range of types and sizes, from fractional to 400 horsepower—all effective in solving the many problems of industrial air conditioning motor drives.

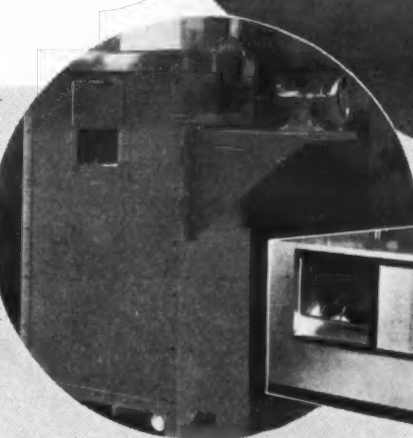
For complete information, call in your nearest Century Motor Specialist—his help may be valuable and he is always at your service.

CENTURY ELECTRIC COMPANY

1806 Pine Street St. Louis, Missouri
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One of the Largest Exclusive Motor and Generator
Manufacturers in the World

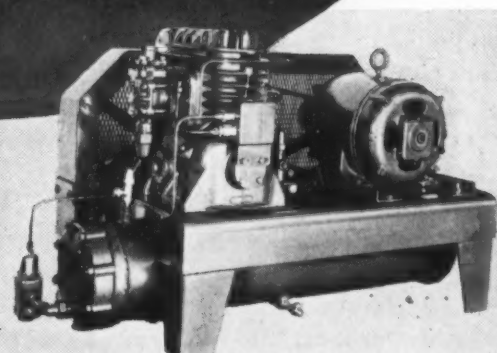
Century
MOTORS



Century Squirrel Cage Motor driving an air conditioning blower.



A Century motor drives the blower fans on this room cooler and heater unit.



Century Squirrel Cage Motor driving a compressor.

Air Conditioning & REFRIGERATION NEWS

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MARCH 4, 1942

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Refrigeration Will Help Win the War

Get Priorities Business!

CONTACTS in the field reveal the rather startling fact that altogether too many jobbers and dealers are ignoring the fact that we're in a war. Not only are they being reticent about going after priorities business, but they are not reporting priorities sales when they get them.

This may result in a temporarily high sales volume, but it will also result in a rapid depletion of irreplaceable stocks. Eventually, that means that somnolent jobbers and dealers will be out of business.

Manufacturers are not filling jobber's orders in most cases unless accompanied by filled-out priorities forms. But, to too many jobbers, those priorities forms are merely ignored. Fearing they might lose the business, they fail to ask the customer for the priority order. Or, the form looks like too much trouble to bother with.

To jobbers now we say what we have been telling dealers earlier: *Let your competitor have that non-defense business.* He'll just be out of the picture that much sooner. If you want to stay in business, reserve your stocks for priority orders. Those you can replace. Non-priority orders you can't.

If your object is to sell as much as you can as fast as you can and then close up, okay. Go ahead and sell to anybody, and don't ask him if the order deserves priority. But if you want to stay in business, begin now to consider Uncle Sam—and his appointees—your only customer.

There is a higher reason than self-interest for taking this attitude. Now that we are in this war, we have to win it. How will you feel if you can't fill an order for Uncle Sam when you receive it? If you sell a part or piece

of material to a non-defense customer now, you may not have it available for Uncle Sam when he needs it.

Patriotically, the jobber can best fulfill his function in war by being ready to supply priorities orders quickly. Time is the most important thing in this war—and time is our worst shortage.

True, filling out all those forms is a damned nuisance. So is war. We are all in the same boat. For instance:

An order for \$6 worth of books for shipment by air to Venezuela required five U. S. customs invoices, four Venezuelan customs invoices, two certificates of origins, and ten Pan-American Airways declarations in addition to regular waybills.

You can do your bit by filling out priorities orders. Incidentally, that will be the height of self-interest, for it will insure your survival during the emergency.

QUOTED

BE SURE IT'S NECESSARY

THERE seems to be almost a smug pride in the announcements of some Washington bureaucrats that "many small businesses will go to the wall" because of war emergency regulations and priorities. These gentlemen, many of them drawing comfortable salaries paid by the rest of us, seem to take a certain satisfaction in the thought of the amount of havoc to civilian life their orders will create in the name of emergency, much as the old-time gunmen used to record their prowess by filing notches on their gun handles.

Our appeal is that these dislocating moves be made only after the person responsible has fully weighed the good which can come from the order against the personal dislocation it will cause and the possible adverse effect on civilian morale. Particularly is this true of regulations which threaten ruin to small businesses.

There are years of thought, and labor, and worry, and long, long hours of work wrapped in every fibre of every small business. The owner's heart and body literally are inextricably entwined in it.

The blow is like that to the thousands of workers who lost their homes in the depression. They weren't losing only the \$1,000 or \$2,000 equity they had in the place. They were losing their dreams, and their hopes, and their years of sacrifice and work they had poured into the house in making it into a home. That was the part that turned the knife in the wound.

So it is with these little businesses which seem to mean something less than nothing to some of our young technocrats in Washington. The businesses are part of the owner's very life. They should not be disturbed unless the emergency makes it necessary, and then only to the extent the emergency makes necessary. We ought in all cases to deal with "close-out" orders that our bureaucrats won't find it necessary to destroy businesses which represent lifetimes of accomplishment this month, and then six months later fish about desperately to revive those same businesses because they suddenly discover the businesses are necessary to the public welfare.—Louis J. Berman in The Whitehall Forum.

IMPROVISED REFRIGERATION

THE present shortage of refrigerated tonnage has been responsible for an improvised method of refrigeration of more than usual interest on the Atlantic route. The necessity of a large amount of cooled shipping space for the great quantity of bacon now being exported to Britain from America has not found the refrigerating engineer wanting, and he has invented a rough and ready method—almost against himself, seeing that the meat comes across without machinery in attendance.

Failing the availability of refrigerated holds, the bacon is stored in the centre of ordinary cargo holds round the walls of which are first piled packages of hard-frozen lard. Now lard is not only a good storage tank for cold, but it is a good cold insulator, so that besides gradually imparting its low temperature to the bacon it protects that merchandise from outside atmosphere.

If care and precision are exercised in arranging these shipments there seems no reason, short of disastrous delay of a boat, for failure to occur at all. Underwriters might, of course, frown at any other time than that of war emergency.—"Modern Refrigeration," London, Jan. 15, 1942.

They'll Do It Every Time By Jimmy Hatlo



LETTERS

JOBBER TELLS MANUFACTURERS HOW THEY CAN HELP

Central Service Supply Co.
409 E. Jefferson St.
Syracuse, N. Y.

Editor:

Following your valiant efforts to awaken the members of our industry in the NEWS prompts me to write a little criticism concerning the manufacturers of both refrigeration equipment and parts. With the exception of a very few companies all the producers have stopped their representatives from calling on the "trade." Almost all of them have stopped sending any literature and the only mail we get outside of invoices is a letter to fill out this form or that form showing defense sales, etc.

There are a great number of helps that most jobbers could receive if the manufacturers would train their field men to learn as much about priorities and the different preference rating orders as is possible and then transmit this information to the wholesaler.

Outside of P-100 there are three other general preference orders that would permit a large number of wholesalers to get materials to sell to their customers. Did the writer learn about these other three from our sources of supply? The answer is No. A great many know of P-100 but how many know about M-67, P-46, or P-55? Countless hours put in at the various OPM (now WPB) offices in this area and other places which business took me to enabled me to pry this information from the men in charge.

Only one manufacturer so far that we know of has undertaken to help the wholesaler with an extensive campaign of mailing every bit of information and forms relative to priorities and that is Revere Brass & Copper Co.

Here is one way the wholesaler can be helped and if all the manufacturers would furnish the information available it would help a lot.

We have had many inquiries from our customers as to how to get materials and priorities and the time the writer used to spend selling is now devoted to keeping up with the regulations and getting this information into the hands of our salesmen and customers.

So we say to the manufacturers: If you want to know one way you can help the wholesaler in '42, read this letter.

THEODORE I. GLOU

CUBAN DEALER WANTS SECOND-HAND REFRIGERATORS

Habana, Cuba

Editor:

As I am an assiduous reader of your REFRIGERATION NEWS, which keeps me in close contact and up to date in the refrigeration field, I have seen in your section "Letters to the Editor" that you furnish whatever information is requested along these lines.

I am an authorized established dealer in this city dealing in second-hand and trade-in refrigerators and, as the situation is getting more and more critical every minute, I am having great difficulties in acquiring second-hand refrigerators for my stock.

I have an idea that there are quite a number of concerns in the States, that sell

on a profitable basis second-hand refrigerators and, presumably, they would be willing to deal with me in a large scale. Therefore, I would like to secure the names and addresses of some of these concerns so that I may get in contact with them.

If you will be kind enough to forward me this information without any inconvenience on your part, I will greatly appreciate it.

A. B. GONZALEZ

SUBSCRIBERS ALL OVER THE WORLD SWEDEN—

Elektrölux Svenska Försäljnings A.-B.
Sjerve, Dept.
Stockholm, Sweden

Dec. 4, 1941

Sirs:

Of course we like to continue with our subscription to AIR CONDITIONING & REFRIGERATION NEWS and you are hereby authorized to continue to send us the NEWS for another three years.

We are returning the slip, but on account of the present restrictions in sending currency out of the country, we cannot attach our remittance. However, we are sending a copy of this letter to our associates in New York, Sjerve, Inc., 51 East 42nd St., and we are asking them to send you a cheque at the amount of \$16 to cover the next three years' subscription.

Hoping this letter will reach you within the next few weeks, we wish to include our greetings for the holiday season and we can assure you, that everything over here is running smoothly and we are all well.

ELEKTROLUX SVENSKA FÖRSÄLJNING A.-B.

CUBA—

Compania Electric de Cuba
Havana, Cuba

Sirs:

Will you please add our name to the ever growing list of readers and subscribers the world over?

CHARLES M. VALDES NUNEZ

AND AT HOME

J. M. Weinberger & Co.
35 Homestead Ave.
Yonkers, N. Y.

Editor:

As a subscriber to your publication, I have always diligently read practically every item in every edition.

Your editorials, so well and authoritatively written, have always been a source of education to me, and particularly now that our country has been called upon to meet an emergency.

For some time now, your editorials have prophesied the trend of our industry and practically without error your prophecies have been 100% true.

Allow me to thank you for assistance gained through your publication in the past, and hoping that it will do as much for your other readers and myself in the future.

JEROME M. WEINBERGER

159 Oliver Rd., Waban, Mass.

Sirs:

Please keep my name on the mailing list and send the bill for the NEWS for 1942 to the above address.

I haven't received it since the first of the year. Please send the back issues which I missed.

You can well understand that I miss getting the NEWS. No need of my telling you it's tops in refrigeration news.

NORMAN C. HONECKER

Retailers Feel OPA Will Allow for Lag in Retail Price Rise

NEW YORK CITY—There is a fair chance that the Office of Price Administration will recognize the principle of time-lag between wholesale and retail price advances in any form of government price control that is put into effect, in the opinion of retail authorities here.

No allowance for this lag was made in the Canadian price control plan, which froze retail and wholesale prices simultaneously. Any substantial application of the Canadian plan in this country, retailers said, would penalize American merchants because of the greater diversity of distribution in this country, and differences in operating costs between varied types of retailers.

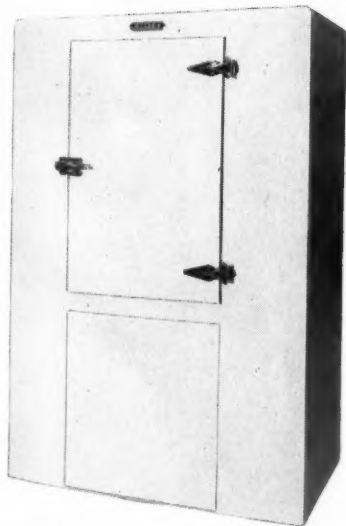
The penalty, it was said, would arise in freezing retail prices behind the advance at wholesale, which would not reflect higher merchandise costs, thus reducing margins and eventually constituting a levy on operating capital. Time-lag between wholesale purchases and sales at retail may be anywhere from a few weeks to more than six months, it was pointed out. To take care of this lag, two suggestions have been made:

1. In the event the OPA finds it necessary to fix retail ceilings on certain items and where increases in cost of goods to retailers have been made during the retailer's period of price lag, the retailer should be permitted to increase his price by adding the same percentage of increase which has occurred in the new merchandise cost.

2. Except in an unanticipated emergency, no retail price ceilings should be established unless ceilings for the retailers' merchandise cost shall have been fixed as of a previous date.

As rationing spreads into more merchandise items, it will be necessary to set up price controls, retailers agreed, since one will not work without the other.

Wilson Markets New 'Home Locker Plant'



SMYRNA, Del.—A new self-contained reach-in quick freezer and "home locker plant" designed for the quick freezing and storage of foods, particularly in the farm home, has been developed by Wilson Cabinet Co., commercial refrigeration manufacturer. The new unit was shown for the first time at the Pennsylvania Farm Show and the Ohio Farmers' Week.

The new cabinet employs both the contact method of freezing with cold plates and the "sub-zero blast" method of forced air circulation to achieve maximum freezing speed.

Operating convenience and simplicity is claimed for the new equipment, which is available in 14 and 22-cu. ft. capacities in the self-contained models, and in 30, 40, 60, and 80 cu. ft. in the sectional models for remote installation. Approximate storage capacity of the smallest model is 500 pounds; of the largest, 3,600 pounds. Refrigeration requirements range from a 1/4-hp. unit for the smallest model to 3/4 hp. for the largest.

The cabinet is insulated with 4 inches of Armstrong Fiberglas and is all-steel, with forged-brass, chrome-plated hardware. Exterior finish is of DuPont enamel.

Car Card Ads Help Build Service Sales

DALLAS, Tex.—Home Furniture Co. here has turned to bus and street car advertising to build volume for its appliance servicing department, which is now operating on an "all-makes" basis.

Bus and street car advertising is proving particularly effective now, the company believes, since recent tire and automobile rationing has caused a marked upturn in the use of public transportation facilities.

Tecumseh's Net Income For 1941 Is \$209,948

TECUMSEH, Mich. — Tecumseh Products Co. for the year 1941 reports net income of \$209,948, or \$1.39 each on 150,000 shares, as compared with \$152,321, or \$1.01 a share, in 1940. Net sales of \$7,292,792 compared with \$3,929,090 in 1940.

G-E Dealer Gets Job For New Air Base

JACKSON, Miss.—A contract for 16 reach-in meat and vegetable coolers for U. S. Army kitchens at the new Jackson Air Base has been awarded the Better Living Appliances, Inc., G-E dealership operated by John Bruno, which also has installed commercial refrigeration at a Federal air school and defense training cantonments in the nearby vicinity.

Despatch Oven Co. Moves Offices From Factory

MINNEAPOLIS — Despatch Oven Co. announces removal of its purchasing, engineering, sales, and executive offices to 722 Central Ave. here, to provide for additional manufacturing and assembly facilities at the factory, which will remain at 622 Ninth St. S.E. Passes to visit factory and engineering department must be obtained at the new office.

555, Inc. Will Make Equipment Line for Bars and Cafes

LITTLE ROCK, Ark.—With its normal sales field considerably reduced as a result of war production requirements, 555, Inc., household and commercial refrigeration distributorship here, has opened a manufacturing division equipped for the making of all types of fixtures for stores and cafes. The new department will be a supplement to the company's regular commercial refrigeration operation.

Store and cafe equipment such as counters, back bars, booths, tables, stools, platforms, and display equipment, including specially built refrigerators, will be built for customers. Designing service will be made available at no extra cost.

Addition of the new department will enlarge the company's service to completely outfitting a bar or cafe. In the past, service has been limited to refrigeration equipment only.

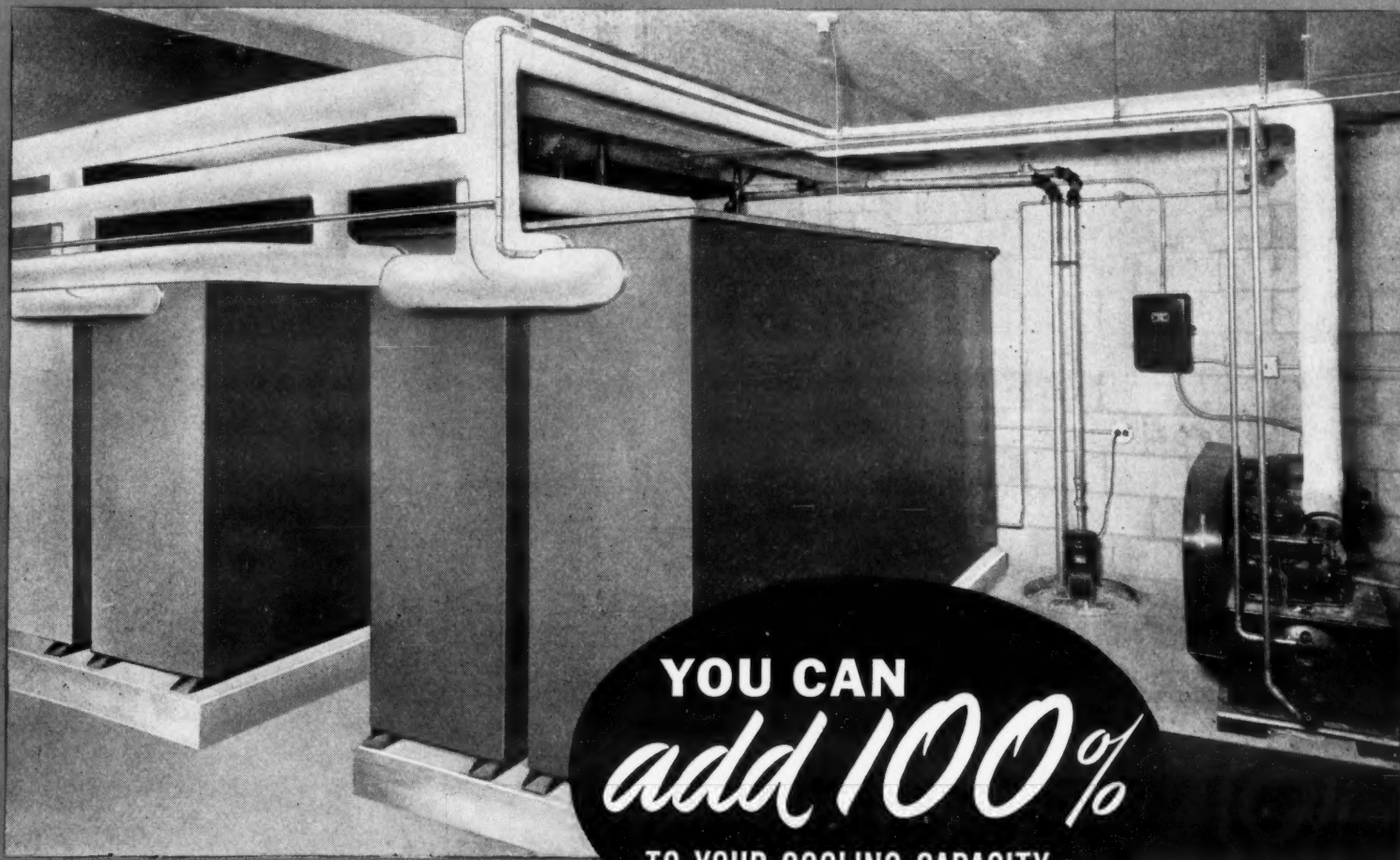
Arbell Supplies Made NRSJA Term Member

CHICAGO — Arbell Refrigeration Supplies, Fresno, Calif., whose partners are G. C. Armour and Charles G. Bell, has been admitted as a term member to the National Refrigeration Supply Jobbers Association, Fred B. Hovey, Jr., association executive secretary, announced.

Edwin F. Tilley, Head of Tilco-Fin, Inc., Dies

BROOKLYN—Edwin Frost Tilley, 61, president of Tilco-Fin, Inc., of Brooklyn, and mechanical engineer, died Feb. 20 at his home in Dunellen, N. J. He was head of the Tilco-Fin, Inc., manufacturer of extended surface tubing for air conditioning, heating, and refrigerating equipment, since the organization of the company in May, 1939.

Born in Locust Valley, L. I., he was graduated from Pratt Institute in 1898 here.



A Typical McQuay Four Bank Icy-Flo Accumulator Installation.

**YOU CAN
add 100%
TO YOUR COOLING CAPACITY**

**STORED UP COOLING WITH THE McQUAY ICY-FLO ACCUMULATOR
SAVES MONEY AND CONSERVES POWER**

**USE THOSE
OFF-PEAK
NIGHT HOURS**

YOUR present compressor may be able to provide more Air Conditioning capacity by operating during "off-peak" night hours. The additional Refrigeration Effect produced is stored in one or more Icy-Flo accumulator sections . . . This stored refrigeration is then utilized by chilling water to 40 degrees in the accumulator and circulating it through standard air conditioners . . . Capacity added in this way will actually cost you far less "per ton" to own and operate, than your present air conditioning plant . . . Your copy of Bulletin 105, and a set of survey sheets will be sent upon request. Write today, McQuay, Inc., 1607 Broadway St. N.E., Minneapolis. Representatives in principal cities.

McQuay

Air Conditioners...Air Conditioning Coils...Blast Coils...Blower Coolers...Comfort Coolers...Cabinet Radiation...Concealed Radiation...Evaporative Condensers...Indoor Cooling Towers...Ice Cube Makers...Icy-Flo Accumulators...Refrigerating Coils...Room Coolers...Unit Heaters...Unit Coolers...Water Cooling Units

Presented on these pages are comparative specifications of electric range models now being produced by 19 U. S. manufacturers, received in response to questionnaires sent out by the NEWS. Initial publication of electric range data last year drew replies from 21 companies, five of which (Crosley, Crawford, Crown, Excel, and Norge) are not included in this year's tabulations. However, three


While the specifications presented herewith give an accurate picture of materials being used by the manufacturers listed in their electric range models at this time, it is important to note that, because of war production requirements, all specifications and materials are subject to change without

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Make or Range	Page
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Performs right because it's uniform, pure and dry

DU PONT METHYL CHLORIDE

Write for your free copy of this 92-page book of refrigerant facts.





Artic

REG. U. S. PAT. OFF.

For information about nearest source of supply, write to:
THE R. & H. CHEMICALS DEPARTMENT
E. I. DU PONT DE NEMOURS & CO. (INC.)
 Wilmington, Delaware
 or National Ammonia Division
 Frankford P. O. Philadelphia, Pa.

ELECTROMASTER

Name of Manufacturer.....	Electromaster, Inc., Detroit, Mich.							
Model No.	16-1	15-1	14-1	11-1	41-1	T41-1	39-1	T39-1
Price (Suggested F.O.B. list)...	\$179.50	\$149.50	\$124.50	\$99.50	\$73.60	\$79.90	\$64.90	\$71.20
GENERAL:								
Exterior Dimensions:								
Width (Inches)	40	40	40	40	21	21	21	21
Depth (Inches)	24	24	24	24	24	24	24	24
Height to Cooking Platform (In.)	36	36	36	36	36	36	36	36
Type or Style	Table Top				Space Saver			
Body Construction	Unit Type							
Exterior Finish: Cooking Top..	Acid Resistant Porcelain Enamel							
Body	Porcelain Enamel							
Interior Finish	Porcelain and Synthetic							
Hardware	Plaskon and Chrome							
Appliance Outlet Location	Right Side Back Plate				Left Side Front Panel			
SURFACE UNITS:								
Type	Tuttle & Kift				Black Glazed Brick, Open			
Number of Units	4	4	4	4	4	4	3	3
Number of Heats	5	5	5	5	3	3	3	3
Wattages Large Unit: High....	2200	2200	2200	2200	2000	2000	2000	2000
(2)	1100	1100	1100	1100	1000	1000	1000	1000
(3)	550	550	550	550	500	500	500	500
(4)	275	275	275	275	..	..	..	..
(5)	140	140	140	140	..	..	..	..
(6) .....	..	..	..	..	..	..	..	..
Wattages: Other Units: High..	Two at 1300				1200	1200	1200	1200
(2)	650	650	650	650	600	600	600	600
(3)	325	325	325	325	300	300	300	300
(4)	165	165	165	165	..	..	..	..
(5)	80	80	80	80	..	..	..	..
(6) .....	..	..	..	..	..	..	..	..
Well Cooker: Unit Type	Open				Open Coil			
Number of Heats	5	5	5	5	3	3	..	..
Wattages: High	1200	1200	1200	1200	1200	1200	..	..
(2)	600	600	600	600	150	150	..	..
(3)	300	300	300	300	140	140	..	..
(4)	150	150	150	150	..	..	..	..
(5)	75	75	75	75	..	..	..	..
(6) .....	..	..	..	..	..	..	..	..
Cooker Well: Material	Porcelain Enamel							
Pail and Lid: Material	Porcelain, Glass Lid							
Cooker Accessories	4-Position Trivet							
Timer?	No							
Switch Panel Location	Right Side Back Plate				Front Panel			
Flush or Recessed	Flush							
Switch Type	Silver Contact Rotary							
Surface Signal Light(s)	4	1 Master	..	..	..	..	..	..
OVEN:								
Inside Gross Dimensions (Nema)	15¼	15¼	15¼	15¼	15¼	15¼	15¼	15¼
Height (Inches)	16½	16½	16½	16½	16½	16½	16½	16½
Width (Inches)	20	20	20	20	20	20	20	20
Depth (Inches)	12¼ x 16½ x 19¼				12¼x16½x19¼		12¼x16½x19¼	
Inside Usable Dimensions (In.)	..				10¼x16½x19¼		10¼x16½x19¼	
Number of Units	2	2	2	2	1	2	1	2
Type of Units	Open Coil				..	..	..	..
Wattages: Upper Unit: Preheat.	2500	2500	2500	2500	..	2500	..	2500
Broil	2500	2500	2500	2500	..	2500	..	2500
Bake .....	..	..	..	..	..	..	..	..
Wattages: Lower Unit: Preheat.	2000	2000	2000	2000	3000	..	3000	..
Broil .....	..	..	..	..	3000	..	3000	..
Bake	2000	2000	2000	2000	3000	2000	3000	2000
Type of Thermostat	Hydraulic							
Thermostat Range (°)	175° to 550°							
Oven Shelves: Finish	Bright Nickel Plated							
Insulation Material	Spun Glass							
Top (Inches)	4	4	4	4	2	2	2	2
Sides (Inches)	2	2	2	2	1½	1½	1½	1½
Door (Inches)	2	2	2	2	2	2	2	2
Watts Needed to Maintain Oven at 400° F. in 75° Room (Nema)....	510	510	510	510	550	550	550	550
Pilot Lights: Number	1	1	1	1	1	1	1	1
Oven Illumination	Automatic, Side	..	..	..	..	..	..	..
Broiler Pan	Porcelain Enamel							
Number Utility Drawers (Including Warmer).....	3	3	3	1	..	..	..	..
Warmer Unit Type	Open Coil				..	..	..	..
Watts	200	200	..	..	..	..	..	..
Control	Toggle Switch	..	..	..	..	..	..	..
Signal Light	Yes	..	..	..	..	..	..	..
ADDITIONAL FEATURES:								
Cooking Top Light	Yes				..	..	..	..
Timer	Yes	..	..	..	..	..	..	..
Minute Minder	Yes				..	..	..	..
Condiment Set	Yes	..	..	..	..	..	..	..
Extra Oven .....	..	..	..	..	..	..	..	..
Extra Broiler .....	..	..	..	..	..	..	..	..
Other Accessories Not Listed ..	Remov. Vent Grille	..	..	..	Removable Crumb Tray			

ESTATE

Estate Stove Co., Hamilton, Ohio	616	613	612	610	619	611
38	38	38	38	38	38	20 1/4
25	25	25	25	25	29 1/2	25
36	36	36	36	36	36	36
Table-Top						
Welded Steel						
Full Porcelain Enamel						
Full Porcelain Enamel						
Black						
Plaskon and Stainless Steel						
Switch Panel						
Chromalox						
3	3	3	3	3	3	3
6	6	6	6	6	6	6
2000	2000	2000	2000	2000	2000	2000
1400	1400	1400	1400	1400	1400	1400
600	600	600	600	600	600	600
500	500	500	500	500	500	500
350	350	350	350	350	350	350
150	150	150	150	150	150	150
1200	1200	1200	1200	1200	1200	1200
700	700	700	700	700	700	700
500	500	500	500	500	500	500
300	300	300	300	300	300	300
175	175	175	175	175	175	175
125	125	125	125	125	125	125
Chromalox						
6	6	6	6	6	6	6
800	800	800	800	800	800	800
450	450	450	450	450	450	450
350	350	350	350	350	350	350
200	200	200	200	200	200	200
115	115	115	115	115	115	115
85	85	85	85	85	85	85
Enameled Trivet						
Front						
Flush						
Slow Make and Break, Reciprocating Type						
15	15	15	15	15	15	15
16	16	16	16	16	16	16
20	20	20	20	20	20	20
11 x 16 x 20						
2	2	2	2	2	2	2
950	950	950	950	950	950	950
2000	2000	2000	2000	2000	2000	2000
950	950	950	950	950	950	950
2850	2850	2850	2850	2850	2850	2850
2850	2850	2850	2850	2850	2850	2850
Wilcolator Hydraulic						
150° to 550°						
Dull Nickel						
Rock Wool						
2	2	2	2	2	2	2
1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
550	550	550	550	550	550	550
1	1	..	..	..	..	..
Yes						
Enameled Pan						
350	350	350	350	350	350	350
Open Coil						
Toggle Switch						
Optional						
Optional						
No						
No						
No						
Yes						

ENTERPRISE

Phillips & Buttorff Mfg. Co., Nashville, Tenn.			
1040C	1138C	1238C	
\$186.45	\$141.65	\$159.00	
40	38	38	
24½	24½	24½	
36	36	36	
_____ Turret Top _____			
_____ Sheet Steel _____			
_____ White Porcelain _____			
_____ White Porcelain _____			
_____ White, Chrome Lines _____			
_____ On Backguard _____			
_____ Tuttle & Kift _____			
3	3	3	
5	5	5	
2200	2200	2200	
1100	1100	1100	
550	550	550	
225	225	225	
112½	112½	112½	
1300	1300	1300	
650	650	650	
325	325	325	
162	162	162	
81	81	81	
_____ Liberty _____			
5	5	5	
1000	1000	1000	
500	500	500	
250	250	250	
125	125	125	
62	62	62	
..	
..	
_____ Tri-Pan Set _____			
_____ On Backguard _____			
_____ Flush _____			
_____ G-E _____			
14	14	14	
16	16	16	
19	19	19	
_____ 14 x 16 x 19 _____			
2	2	2	
_____ Tuttle & Kift _____			
3150	3150	3150	
2550	2550	2550	
550	550	550	
2000	2000	2000	
..	
2000	2000	2000	
_____ Wilcolator _____			
_____ Chrome Plated _____			
_____ Batts _____			
3	3	3	
2¼	1¾	1¾	
_____ Loose Insulation _____			
..	
2	2	2	
..	
_____ Porcelain _____			
2	..	2	
..	
..	
..	
..	

Model 1040C only has Cook-
ing Top Light, Minute Mind-
-Timer combination, Conditi-
-ment Set, and automatic
mer with selector switch
operating oven, top unit, or
convenience outlet.

EVERHOT

Name of Manufacturer.....The Swartzbaugh Mfg. Co.,
Toledo, Ohio
Model No.1005-1006 Capitol
Price (Suggested F.O.B. list)....\$199.50

GENERAL:

Exterior Dimensions:
Width (Inches)40
Depth (Inches)24
Height to Cooking Platform (In.)36
Type or StyleTable-Top Cabinet
Body ConstructionWelded Steel
Exterior Finish: Cooking Top.. Porcelain Enamel
BodyPorcelain Enamel
Interior FinishEnamel
HardwareChromium Plated
Appliance Outlet LocationBacksplasher

SURFACE UNITS:

TypeChromalox
Number of Units4
Number of Heats7

Wattages Large Unit: High....2000
(2)1400
(3)600
(4)500
(5)350
(6)150
(7)125
Wattages: Other Units: High..1500 1200
(2)800 800
(3)700 400
(4)375 300
(5)200 200
(6)175 100
(7)95 75

Well Cooker: Unit Type1200
Number of Heats7
Wattages: High1200
(2)800
(3)400
(4)300
(5)200
(6)100
(7)75

Cooker Well: Material
Pail and Lid: Material
Cooker Accessories3 Pans and Trivet
Timed?Yes
Switch Panel LocationOn Backsplasher
Flush or RecessedFlush
Switch TypeHart 2-Way Rotary
Surface Signal Light(s)Yes

OVEN:

Inside Gross Dimensions (Nema)
Height (Inches)17
Width (Inches)17
Depth (Inches)19
Inside Usable Dimensions (In.)14 x 17 x 19
Number of Units2
Type of UnitsOpen
Wattages: Upper Unit: Preheat. 2500
Speed Broil2750
Broil2750
Bake2750
Wattages: Lower Unit: Preheat. 2500
Speed Broil2000
Broil2000
Bake2000
Type of ThermostatHart Auto. Reset
Thermostat Range (°)Room Temp. to 550°
Oven Shelves: FinishHard Bright Nickel
Insulation MaterialMineral Wool
Top (Inches)3
Sides (Inches)2
Door (Inches)2
Watts Needed to Maintain Oven a 400° F. in 75° Room (Nema).....475
Pilot Lights: Number2
Oven IlluminationYes
Broiler PanYes
Number Utility Drawers3
(Including Warmer).....
Warmer Unit TypeOpen
Watts375
ControlSwitch
Signal LightYes

ADDITIONAL FEATURES:
Cooking Top LightYes
TimerYes
Minute MinderYes
Condiment SetYes
Extra Oven
Extra Broiler
Other Accessories Not Listed .. Oven Humidity Control

FLORENCE

Florence Stove Co.,
Gardner, Mass.
E113D E133D

Exterior Dimensions:
Width (Inches)40
Depth (Inches)24
Height to Cooking Platform (In.)36
Type or StyleTable Top
Body ConstructionWelded Steel
Exterior Finish: Cooking Top.. Acid-Resist. Porcelain
BodyPorcelain Enamel
Interior FinishBlack Japan
HardwareSteel & Plastic
Appliance Outlet LocationBacksplasher Top

TypeChromalox Heatflo
Number of Units3
Number of Heats5

Wattages Large Unit: High....2000
(2)1200
(3)500
(4)300
(5)250
Wattages: Other Units: High..1200 1200
(2)700 700
(3)300 300
(4)175 175
(5)75 75

Open Unit5
Wattages: High1000
(2)550
(3)250
(4)137
(5)62
(6)62
(7)62

Porc. Enamelled Pot.....
Glass
Trivet
Front
Flush
Rotary
Yes

Inside Gross Dimensions (Nema)
Height (Inches)15
Width (Inches)15
Depth (Inches)19 1/2
Inside Usable Dimensions (In.)10 1/2 x 16 w x 17 1/2 d
Number of Units2
Type of UnitsOpen Coil
Wattages: Upper Unit: Preheat. 2750
Speed Broil2750
Broil2750
Bake2750
Wattages: Lower Unit: Preheat. 2000
Speed Broil2000
Broil2000
Bake2000
Type of ThermostatHydraulic
Thermostat Range (°)150° to 550°
Oven Shelves: FinishOxidized
Insulation MaterialFiberglass
Top (Inches)2 1/2
Sides (Inches)1 1/2
Door (Inches)1 1/2
Watts Needed to Maintain Oven a 400° F. in 75° Room (Nema).....570
Pilot Lights: Number1
Oven IlluminationYes
Broiler PanEnamelled Steel
Number Utility Drawers2
(Including Warmer).....3
Warmer Unit TypeStrip
Watts350
ControlOff-On
Signal LightYes

ADDITIONAL FEATURES:
Cooking Top LightYes
TimerYes
Minute MinderOptional*
Condiment SetYes
Extra Oven
Extra Broiler
Other Accessories Not Listed ..

E-113D: Glass door, saucepan, deep fat fry basket.
E-133D: Saucepan. *Deluxe accessory includes timer selector for timing oven, outlet, and cooker. Can be used on all models.

GIBSON

Gibson Electric Refrigerator Corp.,
Greenville, Mich.
ER392SV ER392RV ER392TV

Exterior Dimensions:
Width (Inches)39 3/4
Depth (Inches)25 1/2
Height to Cooking Platform (In.)36
Type or StyleFull Cabinet
Body ConstructionPorcelain on Steel
Exterior Finish: Cooking Top.. Acid-Resisting Porcelain
BodyPorcelain
Interior Finish
Hardware
Appliance Outlet LocationBacksplasher

TypeT.K. or Chromalox
Number of Units3
Number of Heats7

Wattages Large Unit: High....2100
(2)1350
(3)750
(4)525
(5)337
(6)187
(7)131
Wattages: Other Units: High..1250 1200
(2)700 700
(3)550 500
(4)313 300
(5)175 175
(6)137 125
(7)78 75

Open Unit7
Wattages: High1500
(2)850
(3)650
(4)375
(5)212
(6)162
(7)93

Porcelain Enamelled Pot.....
Glass
Trivet
Front
Flush
Rotary
Yes

Inside Gross Dimensions (Nema)
Height (Inches)16
Width (Inches)16
Depth (Inches)20
Inside Usable Dimensions (In.)11 1/2 x 15 w x 18 1/2 d
Number of Units2
Type of UnitsOpen
Wattages: Upper Unit: Preheat. 2900
Speed Broil2900
Broil2900
Bake2900
Wattages: Lower Unit: Preheat. 2200
Speed Broil2200
Broil2200
Bake2200
Type of ThermostatHydraulic
Thermostat Range (°)150° to 550°
Oven Shelves: FinishRustproof
Insulation MaterialFiberglass
Top (Inches)5
Sides (Inches)5
Door (Inches)5
Watts Needed to Maintain Oven a 400° F. in 75° Room (Nema).....
Pilot Lights: Number1
Oven IlluminationYes
Broiler Pan
Number Utility Drawers3
(Including Warmer).....3
Warmer Unit TypeClosed
Watts500
ControlOff-On
Signal LightYes

ADDITIONAL FEATURES:
Cooking Top LightYes
TimerYes
Minute MinderYes
Condiment SetYes
Extra Oven
Extra Broiler
Other Accessories Not Listed ..

HOTPOINT

Edison General Electric Appliance Co., Inc., Chicago, Ill.

RB-15 RB-16 RB-17 RC-4 RC-8 RD-3 RB-11*

Exterior Dimensions:
Width (Inches)37
Depth (Inches)25
Height to Cooking Platform (In.)36
Type or StyleBase Type with Utility Drawers
Body ConstructionElectrically Welded Steel
Exterior Finish: Cooking Top.. Acid-Resisting Porcelain Enamel
BodyWhite Porcelain Enamel
Interior FinishPorcelain Enamel
HardwarePlaskon and High Temperature Baked Enamel
Appliance Outlet LocationBacksplasher

TypeGlass-Sealed Calrod
Number of Units3
Number of Heats5

Wattages Large Unit: High....2100
(2)840
(3)505
(4)210
(5)125
Wattages: Other Units: High..2100 2100
(2)840 840
(3)505 505
(4)210 210
(5)125 125

Open Coil5
Wattages: High700
(2)400
(3)175
(4)100
(5)45

Porcelain Enamelled Steel.....
Porcelain Enamelled Steel.....
Trivet
Front
Flush
Slow Make and Break
Yes

Inside Gross Dimensions (Nema)
Height (Inches)15
Width (Inches)15
Depth (Inches)20 1/2
Inside Usable Dimensions (In.)11 x 15 x 20 1/2
Number of Units2
Type of UnitsOpen Coil
Wattages: Upper Unit: Preheat. 1600
Speed Broil1600
Broil1600
Bake1600
Wattages: Lower Unit: Preheat. 2400
Speed Broil2400
Broil2400
Bake2400
Type of ThermostatHydraulic
Thermostat Range (°)150° to 550°
Oven Shelves: FinishChemically Blued
Insulation MaterialGlass and Rock Wool
Top (Inches)3
Sides (Inches)1 1/2
Door (Inches)1 1/2
Watts Needed to Maintain Oven a 400° F. in 75° Room (Nema).....503
Pilot Lights: Number1
Oven IlluminationYes
Broiler Pan
Number Utility Drawers3
(Including Warmer).....3
Warmer Unit TypeCalrod (Optional)
Watts350
ControlSwitch
Signal LightYes

ADDITIONAL FEATURES:
Cooking Top LightYes
TimerYes
Minute MinderYes
Condiment SetYes
Extra Oven
Extra Broiler
Other Accessories Not Listed ..

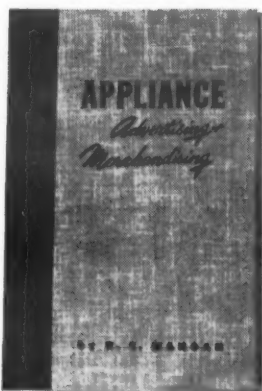
Quick-reference cooking chart fused into drip tray; shelf spacing guide, broiler pan storage, broiler measure (all models except Apt.); illuminated switch dials (deluxe); 3-piece utensil set optional at extra cost. *RB-8 is same as RB-11 except has three surface units, instead of four and has appliance receptacle on switch panel.

Need Help with Appliance Advertising? This Book Will Help

"Appliance Advertising & Merchandising" reveals persuasive methods, crack formulas, and buy-stimulating ideas that have been proved in the selling of all types of electrical appliances. The author, R. E. Mangan, has had many years' experience in advertising and selling refrigerators, ranges, and other appliances. This manual tells how and where to advertise; step by step pointers for increasing the sales-pull in advertising; and how to build more sales-appeal in store displays.

Chapters: (1) how to be a good advertising manager; (2) what can advertising do for your business; (3) how to plan your advertising program; (4) advertising quackery; (5) how to make your store work with your advertising; (6) why newspaper advertising is your best bet; (7) how to prepare newspaper advertisements that sell; (8) retailing with radio; (9) outdoor advertising; (10) screen advertising; (11) put merchandising behind your advertising; (12) the terms, measurements, and mechanics of advertising, rates, contracts, and methods; (13) merchandising in today's market; and (14) highlights of typical dealer operations. Cloth bound. Size 6 1/4 x 9 1/4 inches. 164 pages. 39 illustrations. Price \$2.00.

Business News Publishing Co., 5229 Cass Ave., Detroit, Mich.



Crocker-Wheeler Plans Post-War Promotion

NEW YORK CITY—Established as the basis of a broad-scale program of post-war planning, the newly created sales promotion and publicity department of the Crocker-Wheeler Electric Mfg. Co. is mapping preliminary sales promotion plans designed to meet anticipated post-war industrial conditions in the eastern and New England States. Other districts will be included progressively until the program is nation-wide in scope, the company revealed.

Donald T. McDonald, who joined the company last year, was appointed manager of the department. Before coming to Crocker-Wheeler, Mr. McDonald was associated with the Westinghouse Electric Co. as advertising section head in Pittsburgh, handling promotional activities and publicity on the Pacific Coast, and as sales manager for the northwestern district of the Westinghouse Lamp Co. His present headquarters are located here.

Nutrition Foundation Studies Food & Health of United Nations

NEW YORK CITY—In a "co-operative effort to improve the food, diet, and health of the American people and their allies in the cause of free civilization" 15 of the largest firms in the food industry have established a "Nutrition Foundation."

Dr. Karl T. Compton, president of Massachusetts Institute of Technology, will be chairman of the board of trustees of the "Nutrition Foundation."

"The new foundation will cooperate closely with existing agencies of government, institutions, and societies which are likewise working on various aspects of nutrition, and will aim to help and supplement these agencies rather than duplicate or compete with them," Dr. Compton explained.

Purposes of the new organization were announced as follows:

(1) "To develop and apply the

science of nutrition in its fundamental conception and practical significance as a basic science of public health;

(2) "To aid the food industry in appropriately solving its general and individual problems relating to that science; and

(3) "To do so by lawful and effective means, as a public institution operated on a non-profit basis and dedicated to improve the food and diet and thus to better the health of the people of the United States of America."

Firms participating in the foundation include: American Can, Beech-nut, California Packing, Campbell Soup, Continental Can, Corn Products, General Foods, H. J. Heinz, Libby, McNeil & Libby, National Biscuit, Owens-Illinois Glass, Quaker Oats, Standard Brands, Swift, and United Fruit.

GENERAL ELECTRIC

Name of Manufacturer.....	General Electric Co., Bridgeport, Conn.				
Model No.	AP1-42C8	AP4-42C8	CT1-42C9	CD3-42C9	DD2-42C9
Price (Suggested F.O.B. list).....	\$99.50	\$108.50	\$108.95	\$166.75	\$244.25

GENERAL:

Exterior Dimensions:					
Width (Inches)	19½	19½	37	37	39
Depth (Inches)	25	25	25	25	25
Height to Cooking Platform (In.)...	36	36	36	36	36
Type or Style	Base				
Body Construction	One-Piece Steel				
Exterior Finish: Cooking Top.....	Acid Resistant Porcelain Enamel				
Body	Glyptal				
Interior Finish.....	Glyptal				
Hardware	Metal				
Appliance Outlet Location	Front				

SURFACE UNITS:

Type	Calrod (Tubular)				
Number of Units	3	4	5	5	5
Number of Heats	5	5	5	5	5
Wattages Large Unit: High.....	2100	2100	2100	2100	2100
(2)	840	840	840	840	840
(3)	505	505	505	505	505
(4)	210	210	210	210	210
(5)	125	125	125	125	125
(6)	None				
(7)	None				
Wattages: Other Units: High.....	1250	1250	1250	1250	1250
(2)	690	690	690	690	690
(3)	310	310	310	310	310
(4)	170	170	170	170	170
(5)	75	75	75	75	75
(6)	None				
(7)	None				
Well Cooker: Unit Type	None				
Number of Heats	Open Coil				
Wattages: High	700				
(2)	400				
(3)	175				
(4)	100				
(5)	45				
(6)	45				
(7)	45				
Cooker Well: Material	None				
Pail and Lid: Material	None				
Cooker Accessories	None				
Timed?	None				
Switch Panel Location	Front				
Flush or Recessed	Flush				
Switch Type	Rotary Reversible Silver Contacts				
Surface Signal Light(s)	No				

OVEN:

Inside Gross Dimensions (Nema)...					
Height (Inches)	15	15	15	15	15
Width (Inches)	16	16	16	16	16
Depth (Inches)	20¼	20¼	20¼	20¼	20¼
Inside Usable Dimensions (In.)...					
Number of Units	2	2	2	2	2 ea.
Type of Units	Open Coil				
Wattages: Upper Unit: Preheat....	1600	1600	1600	1600	1600
Speed Broil	4000	4000	4000	4000	4000
Broil	2400	2400	2400	2400	2400
Bake	400	400	400	400	400
Wattages: Lower Unit: Preheat....	2400	2400	2400	2400	2400
Broil	2400	2400	2400	2400	2400
Bake	2400	2400	2400	2400	2400
Type of Thermostat	Hydraulic				
Thermostat Range (°)	140° to 500°				
Oven Shelves: Finish	Gun Metal				
Insulation Material	Rock Wool, Glass Wool				
Top (Inches)	1¾	1¾	1¾	1¾	2¾
Sides (Inches)	1¾	1¾	1¾	1¾	2, 1¾
Door (Inches)	1¾	1¾	1¾	1¾	1¾
Watts Needed to Maintain Oven at 400° F. in 75° Room (Nema).....	1	1	1	1	1
Pilot Lights: Number	No				
Oven Illumination	Yes				
Broiler Pan	Blue Porc. Enamel				
Number Utility Drawers	White				
(Including Warmer)	1				
Warmer Unit Type	Calrod				
Watts	400				
Control	Off-On Sw.				
Signal Light	No				

ADDITIONAL FEATURES:

Cooking Top Light	Yes	Yes	Yes	Yes	Yes
Timer	Yes	Yes	Yes	Yes	Yes
Minute Minder	Yes	Yes	Yes	Yes	Yes
Condiment Set	Yes	Yes	Yes	Yes	Yes
Extra Oven	Yes	Yes	Yes	Yes	Yes
Extra Broiler	Yes	Yes	Yes	Yes	Yes
Other Accessories Not Listed	Utensil Tray				

"Tripl-Oven."

KELVINATOR

Kelvinator Div., Nash-Kelvinator Corp., Detroit

ER-421	ER-421A	ER-423C	ER-427	ER-429
\$117.95	\$134.95	\$174.95	\$192.95	\$214.95

39	39	39	39	39
25	25	25	25	25
36	36	36	36	36
Cabinet with Recessed Base				
One-Piece Welded Steel				
Acid-Resisting Porcelain				
Straight Porcelain				
Straight Porcelain				
White Plastic and Metal Handles				
Right Backsplash				
2 on Center panel				

3	3	3	3	3
7	7	7	7	7
2000	2000	2000	2000	2000
1400	1400	1400	1400	1400
600	600	600	600	600
425	425	425	425	425
350	350	350	350	350
150	150	150	150	150
105	105	105	105	105
1200	1200	1200	1200	1200
700	700	700	700	700
500	500	500	500	500
300	300	300	300	300
175	175	175	175	175
125	125	125	125	125
75	75	75	75	75

7	7	7	7	7
1200	1200	1200	1200	1200
700	700	700	700	700
500	500	500	500	500
300	300	300	300	300
175	175	175	175	175
125	125	125	125	125
75	75	75	75	75

Porcelain on Steel				
Pail: Porc. on Steel; Lid: Heat Resisting Glass				
Trivet				
Yes				
Front Left				
Recessed				
Bi-Rotary Silver				
Yes				
Contact				
Yes				

16	16	16	16	16
16	16	16	16	16
19	19	19	19	19
2	2	2	2	2
3000	3000	3000	3000	3000
3000	3000	3000	3000	3000
2400	2400	2400	2400	2400
2400	2400	2400	2400	2400
2400	2400	2400	2400	2400

3	3	3	3	3
2	2	2	2	2
1½	1½	1½	1½	1½
533	533	533	533	533
2	2	2	2	2
1	1	1	1	1

Hydraulic with Automatic Preheat Cutout				
150° to 550°				
Plated Steel				
Fiberglass				
3	3	3	3	3
2	2	2	2	2
1½	1½	1½	1½	1½

533	533	533	533	533
2	2	2	2	2
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1
1	1	1	1	1

Porcelain Enamel with Plated Steel Rack				
Chromalox				
350				
Thermostat				
Yes				
Yes				
Yes				

Scotch Kettle in Drawer Optional in ER-423C, 427, and 429. All models have ball bearing rollers on utility drawers, concealed oven vents. Fluorescent top light and Minute Timer, ER-429 only. *1-qt. pan, wire basket, and thermometer.

MARION

Rutenber Electric Co., Marion, Ind.

545	547	548	524
..

39¼	39¼	39¼	20
26¼	26¼	26¼	26¼
36	36	36	36
Cabinet			
Welded Frame, Porc. Panels			
Acid Resisting Porcelain			
Porcelain			
Porcelain Oven			
Metal			
On Backsplash			

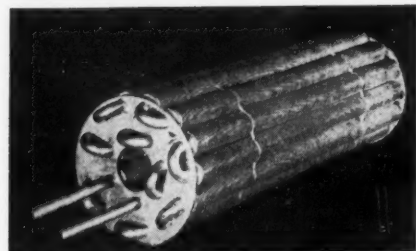
Heatflo	Ring or Rod	Ring
3	3	3
7	7	7
2000	2000	2100
1100	1400	1100
900	600	1000
500	500	700
275	350	360
225	150	330
125	105	160
1200	1200	1250
700	700	700
500	500	550
300	300	420
175	175	233
125	125	187
72	72	100

7	7	7	..
1000	1000	1000	..
600	600	600	..
400	400	400	..
250	250	250	..
150	150	150	..
100	100	100	..
60	60	60	..

Porcelain			
Porcelain, Glass Cover			
Adj. Trivet & Porc. Pan			
Yes			
Backsplash			
Flush			
Bi-Rotary			
1			

16	16	16	14
16	16	16	16
19¼	19¼	19¼	19¼
2	2	2	2
$\frac{11\frac{1}{2} \times 14\frac{1}{2} \times 19}{2} \quad 9\frac{1}{2} \times 14\frac{1}{2} \times 19$			

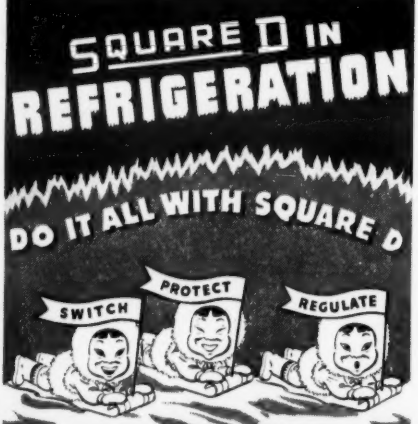
No Joints! No Leaks



This Rome Jointless Water Cooled Condenser is a typical example of Rome's ability to provide trouble free condensing equipment. Rome Water Cooled Condensers are used by many leading compressor manufacturers. Write for complete information.

ROME-TURNEY
RADIATOR COMPANY

222 Canal Street
ROME, N. Y.



SQUARE D COMPANY
REGULATOR DIVISION - DETROIT

U. S. GOVERNMENT Specification

Filtrine

Cafeteria Coolers
Filtrine Mfg. Co., Brooklyn

KEROTEST

REFRIGERATION VALVES AND FITTINGS

Serve Cold Storage

KEROTEST MANUFACTURING CO.
PITTSBURGH, PA.

For Information on Motors
FOR ALL TYPES OF
Air Conditioning and Refrigeration Equipment
WRITE TO

Wagner Electric Corporation
641 PLYMOUTH AVE. ST. LOUIS, MO.

Specify ALCO
for
Maximum Efficiency, Trouble-Free Performance

ALCO VALVE CO. ST. LOUIS, MO.

Bush
FINNED TUBE PRODUCTS
HARTFORD, CONN.

We Sell Only Thru
Distributors of refrigeration and insulation.
Get particulars on our
SAF-T-LOC Individual Lockers
and the New "2 in 1" convertible.
Master Refrigerated Locker Systems, Inc.
121 Main St. Sioux City, Iowa
250,000 Masterbuilt Lockers in Use

SCOTCH MAID

Name of Manufacturer.....Stewart-Warner Corp., Chicago, Ill.
Model No. 9191 9181 9171 9161 9052
Price (Suggested list price F.O.B. factory) \$259.95 \$239.95 \$189.95 \$169.95 \$119.95

GENERAL:

Exterior Dimensions:					
Width (Inches)	39%	39%	39%	39%	36%
Depth (Inches)	24	24	24	24	24
Height to Cooking Platform (Inches)	36	36	36	36	36
Type or Style	Cabinet				
Body Construction	One Piece Welded				
Exterior Finish: Cooking Top	Acid-Resisting Porcelain				
Body	Porcelain				
Interior Finish	Porcelain				
Hardware	Chrome and White Plastic				
Appliance Outlet Location	Backguard				

SURFACE UNITS:

Type	Enclosed	Tubular		
Number of Units	3	3	3	3
Number of Heats	Infinite	5	5	5
Wattages Large Unit: High	2000	2100	2200	2200
(2)	Adjustable	1050	1100	1100
(3)	To	525	550	550
(4)	To	262	275	275
(5)	To	131	137	137
Wattages Other Units: High	1200	1250	1300	1300
(2)	Adjustable	625	650	650
(3)	To	312	325	325
(4)	To	156	162	162
(5)	To	78	81	81
Well Cooker: Unit Type	Open Coil			
Number of Heats	Infinite	5	5	5
Wattages: High	1000	1000	800	800
(2)	Adjustable	500	400	400
(3)	To	250	200	200
(4)	To	125	100	100
(5)	To	62	50	50
Cooker Well: Material	Porcelain Enameled Steel			
Pail and Lid: Material	Porcelain Enameled Steel			
Cooker Accessories	Trivet, Basket	Trivet		
Timed?	Yes			
Switch Panel Location	Backguard			
Flush or Recessed	Flush			
Switch Type	Variable Control			
Surface Signal Light(s)	Panel	Master Pilot	5 Heat	

OVEN:

Inside Gross Dimensions (Nema):				
Height (Inches)	16%	16%	16%	17
Width (Inches)	16	16	16	16
Depth (Inches)	19%	19%	19%	19 1/4
Inside Usable Dimensions (Inches)	12 1/2 x 15 x 19 1/4			
Number of Units	2	2	2	2
Type of Units	Open Coil			
Wattages: Upper Unit: Preheat	2300	2300	3000	2600
Speed Broil	3200	3200		
Broil	2000	2000	3000	2600
Bake	3300	300	300	310
Wattages: Lower Unit: Preheat	2600	2600	1600	1800
Broil	1800	1800	2250	1940
Bake	1800	1800	2250	1940
Type of Thermostat	Duomatic Preheat			
Thermostat Range (°)	175° to 550°	175° to 550°	150°-550°	
Oven Shelves: Finish	Bright Nickel			
Insulation Material	Fiberglass			
Top (Inches)	3	3	3	3 1/2
Sides (Inches)	2 1/4	2 1/4	2 1/4	1 1/4
Door (Inches)	2	2	2	1 1/2
Bottom (Inches)				
Watts Needed to Maintain Oven at 400° F. in 75° Room (Nema)	540	540	540	560
Pilot Lights: Number	2	2	1	1
Oven Illumination	Automatic Recessed			
Broiler Pan	3	3	3	2
Number Utility Drawers (Incl. Warmer)	Enclosed	Optional		
Warmer Unit Type				
Watts	350			
Control	Switch			
Signal Light	Yes			

ADDITIONAL FEATURES:

Cooking Top Light	Yes	Yes	Opt.	Yes	Opt.
Timer	Yes	Yes	Optional		
Minute Minder	Yes	Yes	Optional		
Condiment Set	Yes	Yes	Optional		
Extra Oven					
Extra Broiler					
Other Accessories Not Listed					

*11 1/2 x 14 x 18 1/4. †Models 9191 and 9181 have 5-way timer selector switch. ‡Carload freight allowed to distributor's home city. Prices subject to change without notice. All models have two bake positions, one without heat in top unit and one with 300 w. listed in top for extra browning.

WESTINGHOUSE

Westinghouse Electric & Mfg. Co., Mansfield, Ohio
KL-64 AL-64 LCN-63 RL-664 BL-64 ML-64
*\$152.25 \$119.60 \$100.00 \$286.00 \$232.50 \$209.25

38	38	21	38	38	38
25 1/4	25 1/4	24	25 1/4	25 1/4	25 1/4
36	36	36	36	36	36
Cabinet					
One-Piece Welded Unit Body					
Acid Resisting Porcelain Enamel					
Porcelain Enamel					
Plastic and Chrome					
Backsplash					

3	3	3	3	3	3
5	5	5	5	5	5
2200	2200	2200	2200	2200	2200
1100	1100	1100	1100	1100	1100
550	550	550	550	550	550
275	275	275	275	275	275
135	135	135	135	135	135
1300	1300	1300	1300	1300	1300
650	650	650	650	650	650
325	325	325	325	325	325
160	160	160	160	160	160
80	80	80	80	80	80
Open Coil					
5	5	5	5	5	5
800	800	800	800	800	800
400	400	400	400	400	400
200	200	200	200	200	200
100	100	100	100	100	100
50	50	50	50	50	50
Porcelain Enamel on Steel					
Porcelain Enamel on Steel					
Adj. Trivet					
Backsplash					
Easy Action					
Cam, Silver Contacts					
1					

16	14	16	16	11 1/2	16	16
16	16	16	16	16	16	16
19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2
13 1/2 x 16 x 18 1/4	10 1/2 x 16 x 18 1/4	13 1/2 x 16 x 18 1/4	13 1/2 x 16 x 18 1/4	13 1/2 x 16 x 18 1/4	13 1/2 x 16 x 18 1/4	13 1/2 x 16 x 18 1/4
2	2	2	2	2	2	2
700	700	700	700	700	700	700
3000	3000	3000	3000	3000	3000	3000
3000	3000	3000	3000	3000	3000	3000
700	700	700	700	700	700	700
3000	3000	3000	3000	3000	3000	3000
3000	3000	3000	3000	3000	3000	3000
3000	3000	3000	3000	3000	3000	3000
Hydraulic						
175° to 550°						
Nickel						
Rock Wool						
3 1/2	3 1/2	1 1/2	3 1/2	3 1/2	3 1/2	3 1/2
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2
2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
1	1	1	2	1	1	1
Yes	Extra Deep	Porcelain Enamel	Yes	Yes	Yes	Yes
3	1	2	3	3	3	3
Open Coil						
250	250	250	250	250	250	250
Switch						
Cowl Type Fluorescent						
Built In						
Built In						
Yes						
Yes						
Yes						

*All prices for Zone 1. †To maintain average temperatures, oven uses current only nine minutes out of the hour. ‡Small oven (RL-664) 9 x 16 x 18 1/4.

Crosley Offers Atlas To
New Radio Buyers

CINCINNATI—To help radio-news listeners get a better conception of war developments in far-off lands, as well as in more familiar places, Crosley Corp. is offering a Hammond "New Era" Atlas free with sales of 1942 radio receivers.

The atlas contains 48 foreign maps and 160 pages of accurate information about every country in the world. Maps are newly engraved, and the book contains over 35,000 place names. Bound in maroon art-craft, embossed, and gold-stamped, the atlas contains a self-revising certificate so that it can be brought up-to-date in line with geographical changes resulting from the war.

Builders Supply Firm
Adds Appliances

ASHEVILLE, N. C.—Builders Supply & Coal Co., a reorganization of former members of the Morris-Austin personnel, has opened here handling electrical appliances along with building supplies, furniture, and fuel.

W. F. Kilpatrick, formerly manager of the Morris-Austin electrical department, is secretary and treasurer of the new firm.

Proper Care Will
Lengthen Life of
Electric Range

Proper care of an electric range assumes increased importance in the light of today's conditions, when all appliances will of necessity be called upon for longer, more efficient service, and some repair parts may not be readily available as in the past.

The following suggestions on electric range care are so basic as to be common knowledge with most dealers and home economists, but it might be well to check them once more, just to be sure that the new electric range owner understands:

Wash outside of range with warm soapy water, when cool. If cleaned when hot, there is danger of cracking the porcelain finish. Avoid letting spilled food harden on range—it may cause discoloration. Be sure to remove acid, lemon juice, or vinegar immediately.

Nickel trim may be washed with soap and water, dried, and rubbed with soft cloth.

Food spilled on open surface units should be burned off. Avoid stiff brush or sharp instruments—they may damage the heating coils.

Most closed units can be raised, and the pan beneath removed for

cleaning. Check manufacturer's cleaning recommendations. Otherwise, wipe off, or clean with mild abrasive. Wipe oven with damp cloth after use. Spilled food should be removed as soon as oven has cooled, using mild abrasive, if necessary. Removable shelves can be washed.

Adds Crosley Radio Line

CLINTON, N. C.—W. R. Waters, owner of the newly organized Sampson Supply Co. here, is handling Crosley radios along with small appliances and lamp bulbs.

FOOD
WILL WIN THE
WAR!
Save It With
DOLE
Refrigeration

DOLE Vacuum Plate

COOLING and FREEZING UNITS—
the most efficient and economical

method for FREEZING,
PRESERVING and TRANS-
PORTING perishable FOODS.

DOLE
VACUUM
COLD PLATES

Maximum Refrigeration Efficiency

for all
PERISHABLES

DOLE REFRIGERATING COMPANY
5910 North Pulaski Road - Chicago, Illinois
New York Branch, 601 West 26th Street, New York City

PERCENTAGE IS IN YOUR FAVOR

with the new
KOCH METERED MIRAFLEX COILS



Only in Koch cases can you get Metered Miraflex Coils. This patented, exclusive system is sensational and astounding! Sensational, because it automatically maintains constant, correct temperatures and 80% to 90% relative humidity. Astounding, because exhaustive tests show it delivers 10% higher humidity with 20% shorter running time of the condensing unit... 90% more air circulation with 75% less ice formation on the coils. Miraflex is just one of many reasons why distributors sell Koch. Write for complete details and open territories.

KOCH REFRIGERATORS
NORTH KANSAS CITY, MISSOURI
You'll make money selling KOCH

MORE IMPORTANT THAN EVER BEFORE

RANCO REPLACEMENT REFRIGERATOR CONTROLS



If there ever was a time when every refrigerator—household and commercial—had a big job to do, that time is NOW! America's food supply is a vital defense factor. And proper control is all-important in efficient refrigeration. Ranco is ready—with the world's most complete line of General and Exact Replacement Controls.

RANCO Inc., Columbus, Ohio

TO CONSERVE FOOD FOR AMERICA'S WAR EFFORT — WILSON OFFERS NEW REACH-IN Self-Contained QUICK-FREEZER

FOR FREEZING AND STORING FOODS ON THE FARM—IN THE HOME

<p>NO CLOSED SEASON ON FRESHNESS</p> <p>... EVERY HOME CAN OWN A WILSON</p>	<ul style="list-style-type: none"> Self-Contained Models in 14 and 22 cu. ft. capacity Larger sizes for remote installation up to 80 cu. ft. Complete with all refrigeration, test-operated, ready to run Fast dual-action freezing Ease of operation 	<p>CONVENIENCE PLUS BUGGED EFFICIENCY</p> <p>... IT WILL SERVE & SAVE FOR YEARS</p>
---	--	---

A FEW FRANCHISES AVAILABLE TO QUALIFIED DEALERS

WRITE FOR DETAILS WILSON CABINET CO. SMYRNA DELAWARE

MODERN DESIGN — GENERAL LINE



ALL PORCELAIN
BETTER LIGHTING
TESTED OPERATION
TROUBLE-FREE
GOOD-LOOKING
HIGH QUALITY
LOWEST PRICE—NO EXTRAS

Cases, Coolers, Reach-Ins. Beer display and storage cabinets

Best Dealer Proposition.
Write Today! Dept. G-6
5th and BAINBRIDGE STS., PHILADELPHIA, PENNA.

GENERAL REFRIGERATOR CO.

The New POLARTRON
FOR PRESSURE CONTROL UP TO 1 H.P.A.C.

MINNEAPOLIS-HONEYWELL REFRIGERATION Control

Eight Series 40 Polartron Advantages

Separate "On and Off" Switches • Universal Range • Capillary Pressure Connections
Faster Models to Stock • Minimum Free Service • "Cooling Control" as Set or as Unit
No Short Cycling • Polartron Compressor Converts into Frost-Free Constant Cool

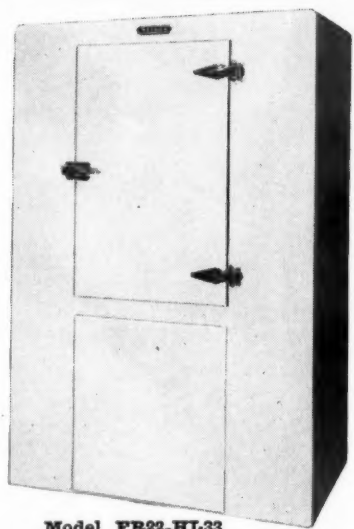
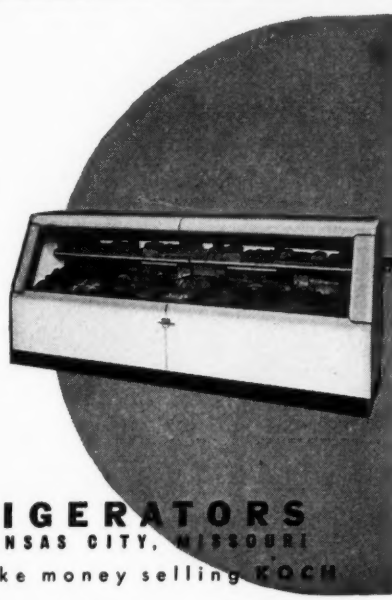
IGLOO Says: Freeze on to something Hot!

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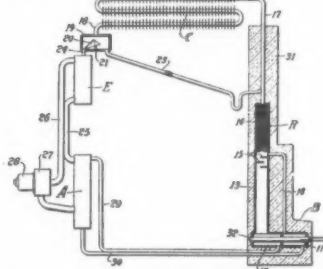


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PATENTS

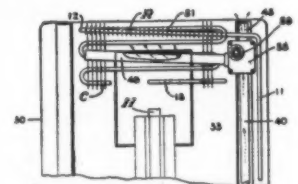
Weeks of Feb. 3 & 10

2,271,542. RECTIFIER FOR REFRIGERATING SYSTEMS. Curtis C. Coons, North Canton, Ohio, assignor to The Hoover Co., North Canton, Ohio, a corporation of Ohio. Application Aug. 8, 1938, Serial No. 94,935. 25 Claims. (Cl. 62-119.5.)



1. In an absorption refrigerating system, having a boiler system and a condenser, a reflux rectifier comprising a vessel adapted to receive refrigerant vapor and absorption liquid vapor from the boiler system, means for insulating said vessel and means for conveying a portion of the refrigerant condensed in the condenser to said vessel to aid in the removal of the absorption liquid vapor from the refrigerant vapor therein.

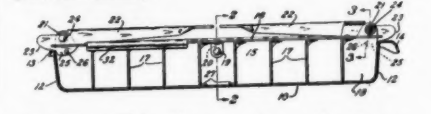
2,271,543. REFRIGERATION. Curtis C. Coons, North Canton, Ohio, assignor to The Hoover Co., North Canton, Ohio, a corporation of Ohio. Application Oct. 10, 1938, Serial No. 234,164. 13 Claims. (Cl. 62-5.)



1. In an absorption refrigerating apparatus including a boiler, and an air-

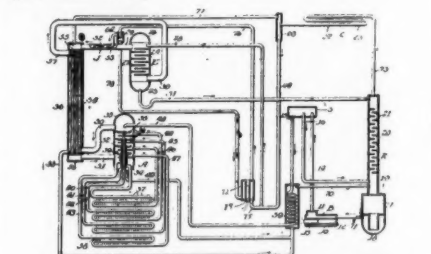
cooled rectifier, fuel burning means for heating the boiler, means for leading products of combustion into heat exchange relation with said air-cooled rectifier, and means for controlling the quantity of products of combustion being led into heat exchange relation with said rectifier.

2,271,558. REFRIGERATION. William H. Kitto, Canton, Ohio, assignor to The Hoover Co., North Canton, Ohio, a corporation of Ohio. Application Oct. 5, 1938, Serial No. 233,361. 16 Claims. (Cl. 62-108.5.)



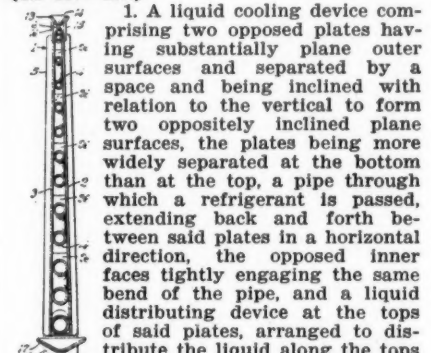
1. In combination, an ice cube tray, a grid assembly comprising longitudinal and cross grid members removably positioned therein, a cover for said tray secured to said grid assembly and force multiplying means carried by said longitudinal grid member cooperating with said cover for releasing ice cubes from said grid assembly.

2,271,566. ABSORPTION REFRIGERATING APPARATUS. Rudolph S. Nelson, Rockford, Ill., and Kurt V. Nesselmann, Berlin, Siemensstadt, Germany, assignors to The Hoover Co., North Canton, Ohio, a corporation of Ohio. Application April 13, 1931, Serial No. 529,616. 8 Claims. (Cl. 62-119.5.)



1. In an absorber adapted for use in refrigerating apparatus, the combination of a main vessel, a plurality of slightly cupped trays mounted in said vessel and adapted to hold absorption liquid, a baffle plate disposed above each of said trays and a plurality of conduits connected to said vessel, one above each baffle plate whereby absorption liquid may flow from a conduit over a baffle plate, and into a tray.

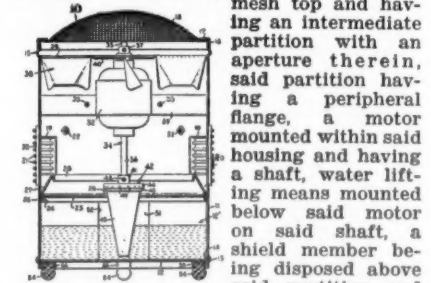
2,271,648. LIQUID COOLING DEVICE. Herman W. Kleist, Chicago, Ill., assignor to Dole Refrigerating Co., Chicago, Ill., a corporation of Illinois. Application May 28, 1937, Serial No. 145,358. 7 Claims. (Cl. 257-187.)



1. A liquid cooling device comprising two opposed plates having substantially plane outer surfaces and separated by a space and being inclined with relation to the vertical to form two oppositely inclined plane surfaces, the plates being more widely separated at the bottom than at the top, a pipe through which a refrigerant is passed, extending back and forth between said plates in a horizontal direction, the opposed inner faces tightly engaging the same bend of the pipe, and a liquid distributing device at the tops of said plates, arranged to distribute the liquid along the tops of the plates, the said liquid to be cooled passing down by gravity along the outer surfaces of said plates, the incline of the plates causing the liquid to be brought into intimate contact therewith.

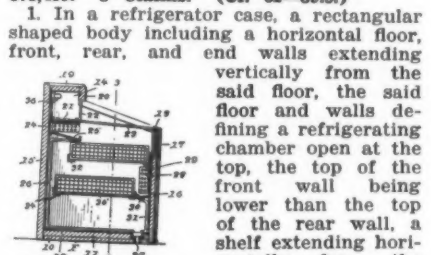
2,271,709. AIR CONDITIONER. William A. Norris, Alhambra, Calif., assignor to William H. Fabry and Rae H. Fabry, as joint tenants, with right of survivorship. Application Jan. 31, 1941, Serial No. 376,787. 3 Claims. (Cl. 261-91.)

1. In an evaporative cooler, a housing having a closed bottom and a reticulated mesh top and having an intermediate partition with an aperture therein, said partition having a peripheral flange, a motor mounted within said housing and having a shaft, water lifting means mounted below said motor on said shaft, a shield member being disposed above said partition and comprising a portion having a flange enjoining said partition flange, means to secure said flanges to the housing, said water lifting means being adapted to raise water from said bottom to a location above said partition, said housing having an air outlet above said partition, and a fan disposed above said motor on said shaft and adapted to direct a column of air upon water on said partition.



2,271,802. REFRIGERATED CASE. Severin B. Nordskog, Cedar Falls, Iowa. Application Feb. 11, 1941, Serial No. 375,439. 3 Claims. (Cl. 62-89.5.)

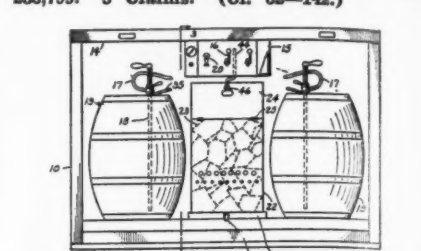
1. In a refrigerator case, a rectangular shaped body including a horizontal floor, front, rear, and end walls extending vertically from the said floor, the said floor and walls defining a refrigerating chamber open at the top, the top of the front wall being lower than the top of the rear wall, a shelf extending horizontally from the rear wall in a plane approximately level with the top of the front wall, a horizontally disposed refrigerating coil extending longitudinally of the case immediately below the said shelf, and a longitudinally extending row coil supported in a vertical plane adjacent the inner side of the front wall in a position spaced from the top and bottom of the said front wall and substantially below the level of the rear horizontal coil.



2,271,868. APPARATUS FOR COOLING BEVERAGES. Michael A. Martin, Erie, Pa. Application July 11, 1939, Serial No. 283,799. 5 Claims. (Cl. 62-142.)

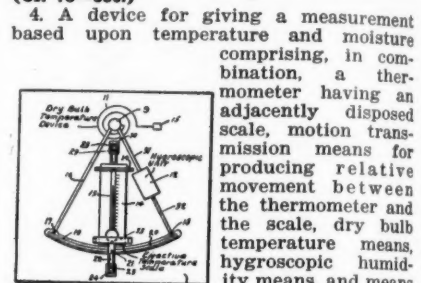
1. In a beverage cooling apparatus, the combination of a heat-insulated cabinet adapted to receive a beverage container, a box within the cabinet adapted to have a solid cooling agent adapted to be liquefied by heat stored therein, the bottom of the box being adapted to receive liquid to a predetermined level cooled by contact with the cooling agent, a cooling tank, a beverage supply line adapted to connect with the beverage container extending to the bottom portion of the box to the tank and encircling the beverage supply line for a substantial distance, return means extending from the tank to the box, pump means for circulating cooling liquid through the conduit means, tank and return means, and the box being open at the top portion thereof and provided with perforations in the bottom portion thereof whereby air in the cabinet may circulate through the box and in contact with the cooling agent to be cooled thereby.

2,271,881. EFFECTIVE TEMPERATURE INDICATING DEVICE. George V. Woodling, Cleveland, Ohio. Application July 3, 1939, Serial No. 282,572. 19 Claims. (Cl. 73-336.)



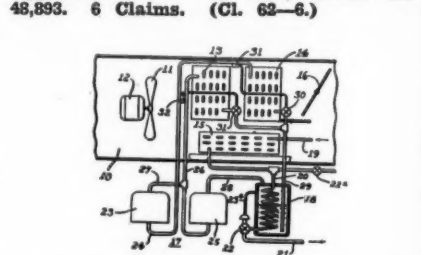
4. A device for giving a measurement based upon temperature and moisture comprising, in combination, a thermometer having an adjacently disposed scale, motion transmission means for producing relative movement between the thermometer and the scale, dry bulb temperature means, hygroscopic humidity means, and means for operating the motion transmission means by both the dry bulb temperature means and the hygroscopic humidity means.

2,272,063. AIR CONDITIONING APPARATUS. Robert E. Candor, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Nov. 8, 1935, Serial No. 45,893. 6 Claims. (Cl. 62-6.)



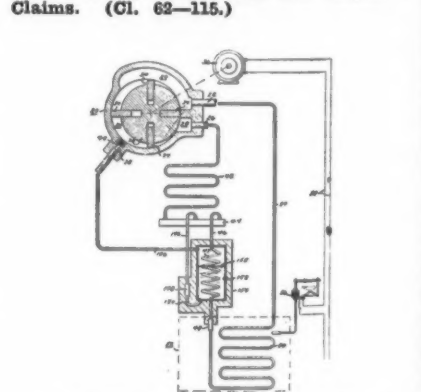
5. An air conditioning apparatus comprising a first evaporator having means for maintaining said evaporator at a relatively warm refrigerating temperature, a second evaporator having means for maintaining said evaporator at a relatively cold refrigerating temperature, said evaporators satisfying a common air cooling load, a first motor-compressor unit connected to said second evaporator, a second motor-compressor unit having its suction side connected to said first evaporator and to the discharge of said first unit, condensing means connected to said second unit and to said evaporators, and means inherently responsive to air conditions for starting said units in sequence.

2,272,093. REFRIGERATING APPARATUS. Alex A. McCormack, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Oct. 24, 1939, Serial No. 301,010. 1 Claims. (Cl. 62-115.)



1. Refrigerating apparatus including a multiple effect compressor having a low pressure suction inlet and a high pressure suction inlet for compressing low and high pressure suction gas in a single stage in the same compression chamber, a condensing means for the compressed gas, a first evaporating means having its outlet connected to said low pressure suction inlet and its inlet connected to a refrigerant control device for controlling the flow of refrigerant into said first evaporating means, closed fluid conduit means communicating with the condensing means and with said device for conducting refrigerant from said condensing means to said device, a second evaporating means for evaporating liquid refrigerant in direct contact with the condensed fluid conduit means containing the condensed liquid refrigerant flowing from said condensing means to said condensing device, the outlet of said second evaporating means being connected to said high pressure inlet, the inlet of said second evaporating means being provided with a refrigerant control device connected to said condensing means.

2,272,715. FREEZING. Los Angeles.

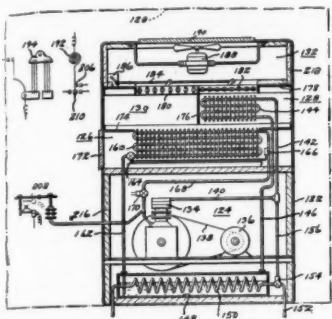


1. In a combination having an unit and the inlet operable the house discharge cooling unit, do and outlet from unit to return unit to when the mally clo one of the gates whe ing means of which closing of.

(Concluded on Page 15, Column 1)

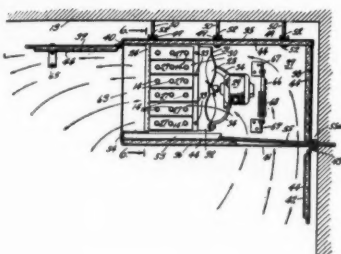
Patents (Cont.)

(Concluded from Page 14, Column 5)
 2,272,099. **REFRIGERATING APPARATUS.** Nelson J. Smith, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Feb. 29, 1936, Serial No. 66,460. 4 Claims. (Cl. 62-6.)



4. In a system for cooling and dehumidifying air for an enclosure, the combination of an evaporator, condenser means, means for translating refrigerant from said evaporator to said condenser means, means for conveying air for said enclosure in heat exchange relation with the evaporator, whereby its dewpoint temperature is decreased, means for conveying air thus treated in heat exchange relation with said condenser means, whereby the dry bulb temperature of the air is increased and the condenser means is cooled, means for circulating extraneous medium for cooling the condenser means, means for varying the flow of said extraneous medium in accordance with condensing requirements, and means responsive to the temperature conditions of the air controlling the passage of air over said condenser means.

2,272,302. **DEFROSTING MEANS.** Hermann J. Knecht, Chicago, Ill. Application May 5, 1939, Serial No. 271,833. 5 Claims. (Cl. 62-2.)



1. In a refrigerating device, the combination of a heat insulated housing having an inlet and an outlet, a cooling unit and a blower in the housing between the inlet and outlet, said blower being operable to supply air to the interior of the housing through the inlet and to discharge the supplied air through the cooling unit and therefrom through the outlet, doors operable to close the inlet and outlet, one or more by-passes leading from the discharge side of the cooling unit to the suction side of the blower to return air discharged through the cooling unit to the suction side of the blower when the doors are closed, gates normally closing said by-passes, means on one of the doors adapted to open said gates when said door is closed, and heating means in the housing, the operation of which is controlled by the opening and closing of the doors.

2,272,614. **REFRIGERATOR.** Louis William Reinken and Jacob Suter Janner, London, England, assignors to International Standard Electric Corp., New York, N. Y. Application Sept. 13, 1939, Serial No. 294,648. In Great Britain Sept. 16, 1938. 7 Claims. (Cl. 62-114.)

3. A refrigerator comprising a freezing chamber, a container for receiving a mixture to be frozen in said chamber, a rotatable stirring shaft extending downwardly into said container, laterally projecting paddles on said shaft, said shaft being longitudinally movable during rotation thereof and said paddles being shaped to impart an upward thrust to said shaft while stirring a mixture in said container, an electric motor drivably connected with said shaft, and a switch for operating said motor having an operating lever disposed axially above said shaft whereby said switch is operated by upward movement of said shaft to stop said motor.

2,272,715. **MEANS AND METHODS OF FREEZING LIQUIDS.** Ernest E. Lindsey, Los Angeles, Calif. Application July 27,

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1940, Serial No. 347,982. 10 Claims. (Cl. 62-114.)

1. In a device for freezing liquid material, a cylinder having a smooth inner surface, said surface being adapted to be cooled below the freezing point of said liquid, means for introducing said liquid into the interior of said cylinder, and rotating means operating on said material while in said cylinder, said rotating means including a plurality of resilient blades separately and serially attached to said rotating means and extending toward said surface in a rearwardly tangential direction with respect to the direction of rotation of said rotating means, and terminating adjacent but not touching said surface.

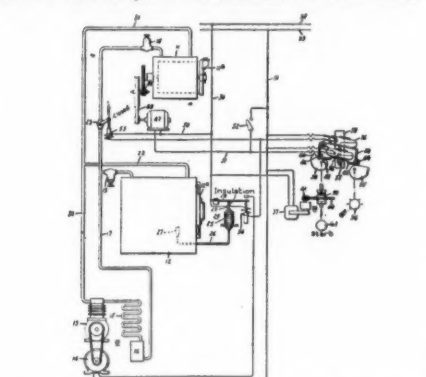
2,272,746. **AIR PURIFYING UNIT.** Osmund Holm-Hansen, Bridgeport, Conn., assignor to General Electric Co., a corporation of New York. Application Oct. 2, 1940, Serial No. 359,389. 2 Claims. (Cl. 183-4.)

1. In an air deodorizing unit comprising a casing and means for causing rotation thereof, said casing being provided with an inlet opening and an outlet opening, means for causing air to be drawn into said casing through said inlet and expelled through said outlet, said means consisting of a body of an air deodorizing material of the type having a plurality of passages of substantial size extending therethrough for the circulation of air, said passages being of such a size that the material defining said passages serve as the principal air propellant means.

2,272,750. **REFRIGERATED APPLE VENDING MACHINE.** Ira M. Miller, Yakima, Wash. Application July 29, 1940, Serial No. 346,576. 6 Claims. (Cl. 313-89.)

2. In an apple vending machine, an apple storage compartment; an endless belt type apple cardamping unit comprising a voltage electromagnet and a current electromagnet, said electromagnets having core members in the same plane at right angles to an air gap defined by said core members, and in which air gap induction driving torque fluxes are produced by said electromagnets, permanent magnet means in the plane of said core members for producing damping fluxes across such air gap, and supporting structure by which all of said magnet means are secured to form an integral structure.

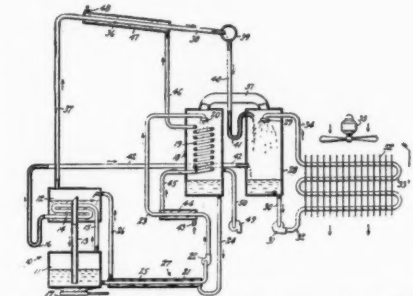
2,272,764. **REFRIGERATING SYSTEM.** Lee E. Beard, Fort Wayne, Ind., assignor to General Electric Co., a corporation of New York. Application Oct. 17, 1940, Serial No. 361,637. 10 Claims. (Cl. 62-114.)



1. A refrigerating system including two evaporators, common means for supplying refrigerant to said evaporators, means arranged to control the admission of refrigerant to one of said evaporators and to cooperate with said common supply means for maintaining a predetermined pressure within said one evaporator, means arranged to control the admission of refrigerant to the other of said evaporators and to cooperate with said supply means for maintaining a predetermined pressure in said other evaporator lower than in said one evaporator, shut-off means for preventing the admission of refrigerant to said one evaporator, control means dependent upon the temperature produced by said other evaporator for effecting operation of said supply means, and a time controlled mechanism for operating said refrigerating system in repeated cycles of a pre-determined length of time, each cycle including first opening said shut-off means for admitting refrigerant to said one evaporator and starting the operation of said supply means to supply refrigerant to said one evaporator and operating the same continually for a predetermined length of time and thereafter closing said shut-off means and placing said common supply means for the remainder of the cycle under control of said temperature dependent control means.

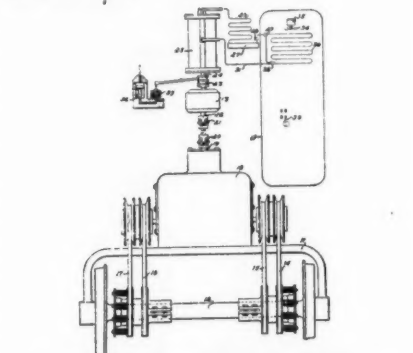
2,272,856. **REFRIGERATION.** Albert R. Thomas, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware. Application June 25, 1937, Serial No. 150,944. 13 Claims. (Cl. 62-119.5.)

1. A refrigeration system making use of evaporation of water at a low pressure and including an absorber in which water vapor is absorbed into solution in an absorption liquid, a generator in which water vapor is expelled out of solution by heat, said generator having a plurality of chambers, means for heating one of said chambers, and a condenser connected to said first chamber for heating another



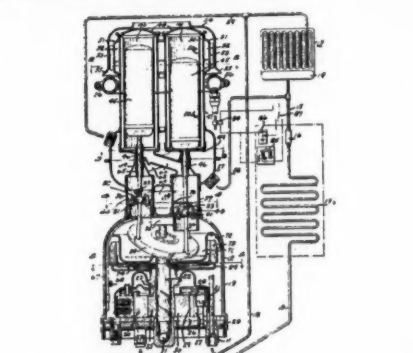
of said chambers, a condenser connected to said second generator chamber, and an evaporator connected to receive liquid from both said condensers.

2,272,913. **REFRIGERATING APPARATUS.** Harry B. Hull, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Original application Jan. 31, 1935, Serial No. 4,344. Divided and this application Dec. 18, 1937, Serial No. 180,629. 1 Claim. (Cl. 230-29.)



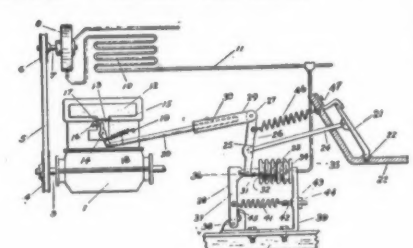
In a multiple cylinder compressor, a main housing, a drive shaft within said housing, and a plurality of rotary compressor units driven thereby each of which units comprises means forming a pumping cylinder having a cylindrical wall, inlet and outlet ports for said cylinder, a divider block between said ports, a cylindrical piston of less diameter than said cylinders, means for positioning said piston in varying eccentric relation within said cylinder, means including said drive shaft on which said piston is mounted whereby the axis of said piston is caused to revolve about a center within the cylindrical wall of said cylinder, and speed responsive means for moving said piston into varying eccentric relation with said cylindrical wall in accordance with the speed of said shaft, one of said speed responsive means being responsive to a different speed than another of said speed responsive means.

2,272,925. **REFRIGERATING APPARATUS.** Harry F. Smith, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application June 26, 1936, Serial No. 87,474. 6 Claims. (Cl. 62-115.)



2. In a refrigerating device, a compressor, a condenser, and an evaporator connected in refrigerant flow relationship, a Stirling cycle heat engine for operating said compressor, and means whereby refrigerant condensed in said condenser is utilized in cooling a portion of said heat engine.

2,272,973. **CONDENSER PRESSURE CONTROL.** Anthony F. Hoessel, Chicago, Ill., assignor to Auto Coolers, Inc., Chicago, Ill., a corporation of Illinois. Application March 13, 1940, Serial No. 323,733. 3 Claims. (Cl. 62-4.)



1. In an automobile air conditioning system, the combination of a refrigerant vapor compressor driven by the automobile engine and compressing refrigerant vapor into a condenser, said automobile engine being fed with a motive fluid of varying quantity at the will of the operator and means to automatically reduce the maximum potential feed of the motive fluid in response to the occurrence of an abnormally high pressure within said condenser.

2,272,995. **APPARATUS FOR CLEANING AIR AND OTHER GASES.** Willy Neumann, Rollberg over Bernau, near Berlin, Germany. Application March 20, 1939, Serial No. 263,027. In Germany Dec. 14, 1938. 3 Claims. (Cl. 183-8.)

1. Apparatus for purifying air and other gases, comprising a housing, a liquid bath in said housing, upper and lower guide members in said housing arranged to impart a substantially horizontal direction of flow to the entire air to be purified, said guide members being substantially parallel to each other and the lower of said members being in the form of a closed bottom, and a plurality of

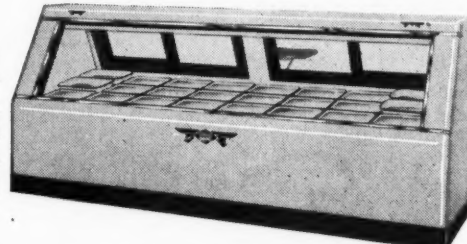
vanes arranged between said guide members to impart a rotating direction of flow to the air passing between said guide members, said vanes being essentially greater in diameter than the distance of said guide members from each other and the walls of said housing being curved and enlarged at least in the region of and above said guide members and above said liquid bath, said vanes extending almost to said curved and enlarged walls.

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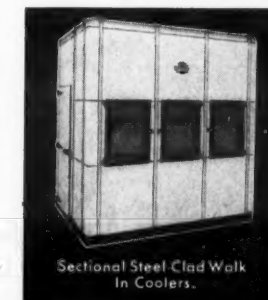


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Evaporative Condensers	Instantaneous Water Coolers

Refrigerator 'Freeze' Order Is Interpreted

(Concluded from Page 1, Column 1)
Interpretation No. 2 of Order L-5-b may help." (Editor's Note: This government interpretation says that refrigerators sold but not delivered prior to Feb. 14 cannot be shipped unless shipment is made pursuant to the provisions of the order, which would seem to make it imperative that they be included in the quota. However, Mr. Hammersly asks for the "facts," which may open the way to an appeal in certain cases.)

Question 3: What should the dealer do with his stock that is over the quota he is permitted to sell under the terms of the freezing order?

Answer: "A dealer with frozen stocks cannot return them to his distributor or wholesaler, but must await further instructions from this office."

Manufacturers Cannot Dispose of Materials

WASHINGTON, D. C.—The War Production Board on Feb. 27 amended the Refrigerator Limitation Order (L-5-c) to prohibit refrigerator manufacturers from disposing of their inventory of materials, semi-processed and processed parts except to other refrigerator companies for use in the manufacture of refrigerators permitted under L-5-c or for repair and maintenance parts.

The amendment also requires each manufacturer to file with the WPB not later than March 15 an estimate of his inventory of raw materials, semi-processed parts, and finished parts that will remain in his hands after he has completed manufacture of his quota of refrigerators.

Under L-5-c the production of refrigerators must be discontinued on or before April 30, 1942. During the two and a half month period between the issuance of the order and the cut-off date a manufacturer is permitted to produce three times the number of units of his February quota.

The amendment is intended to present the use of inventory for non-essential purposes, the WPB declared.

'Times' Co. Names Franklin

NEW YORK CITY—Times Appliance Co., Westinghouse distributor, has appointed Herbert R. Franklin advertising and sales promotion manager.

CLASSIFIED ADVERTISING

RATES for "Positions Wanted," 5¢ per word; minimum charge, \$2.50. Three consecutive insertions, 12½¢ per word; minimum charge \$6.25.

RATES for all other classifications, 10¢ per word, minimum charge, \$5.00 per insertion. Three consecutive insertions, 25¢ per word, minimum charge, \$12.50.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count.

PAYMENT in advance is required for advertising in this column.

POSITIONS AVAILABLE

TIME STUDY and production engineer—Leading meat packing company offers opportunity for advancement, good present salary and permanent employment in a stable food industry for a few men experienced in time study, production control, layout, and standard labor costs. These opportunities not dependent on defense production. Men with mechanical training preferred. Interviews arranged for those who qualify on basis of complete details of personal background, education, and experience as submitted in first letter. All negotiations carried on in strict confidence. Box 1385, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

MODEL No. 25, 5 gallon cabinet type Mills Freezer, equipped with high temperature storage compartment, 3, 60-gallon Mills Hardening Cabinets. Miscellaneous—various make Ice Cream Cabinets, 1, 5 H.P. Universal 4 cylinder Water Cooled Compressor, 1, 2 H.P. Zerozone 2 cylinder Water Cooled Compressor, 2, 1½ H.P. water cooled, 4 cylinder Par Units (two months in service—practically new), 9, York 2 cylinder 1 H.P. water cooled compressors (practically new). Also a few Servels, Frigidaires, brand new knockdown hardening cabinets. Other equipment too numerous to mention. What do you need? On sale for client, Attorney Charles A. Pincus, 142 E. 32nd Street, New York, N. Y.

Decorated In the Battle of Production



Fred L. Riggan, Sr., president of the Mueller Brass Co., Port Huron, Mich., receives the coveted Navy "E" pennant, symbolic of outstanding performance in the production of naval ordnance material, from Capt. E. A. Lofquist of the Ninth Naval District. Ceremony was held recently at the Mueller plant.

Priorities & Postwar Plans Discussed By M-H Branch Heads

MINNEAPOLIS — Branch managers of Minneapolis-Honeywell Regulator Co. met for a three-day conference at the Nicollet hotel in Minneapolis to discuss operations under war conditions and to plan a united front in thought and action throughout the whole national field organization, comprising 47 branch and district offices.

Among the things discussed in the three days' agenda were priorities and ways and means to keep the trade informed of priorities' regulations and assist them in getting priority orders. How to maintain customer contacts under war conditions was another topic.

In advertising, the company will continue to keep its name before the trade and its customers, while at the same time giving full support to the war effort.

A feature of the meeting was a discussion on postwar planning—it being the unanimous opinion of those present that such planning was imperative and worthy of immediate consideration. A committee will be appointed by C. B. Sweatt, vice president in charge of sales, who presided at the meetings, to research this problem.

Those in attendance from out of town were:

Arnold Michelson, vice president, New York City branch; Charles L. Saunders, vice president, Chicago branch; L. Morton Morley, vice president, Brown Instrument division, Philadelphia; A. H. Koch, manager, Atlanta branch; Fred Kaiser, manager, Detroit branch; W. R. Moore, manager, Cleveland branch; C. L. Peterson, manager, San Francisco branch; J. B. Banks, manager, Portland, Ore. branch; R. L. Mallory, manager, Houston branch; B. C. Simons, manager, St. Louis branch; W. A. Reichow, manager, Kansas City branch; H. C. Jenkins, manager, Twin Cities, Minn. branch; W. Murphy, New York City branch.

30 Wis. Dealers Exhibit At Hardware Show

MILWAUKEE — Thirty appliance dealers, chiefly members of the Wisconsin Radio, Refrigeration & Appliance Association, exhibited 1942 appliance lines at the recent forty-sixth annual convention of the Wisconsin Retail Hardware Association, to "bolster morale and public confidence in the appliance industry."

Cutler-Hammer Net Income Totals \$1,498,616

MILWAUKEE—Net income for 1941 for Cutler-Hammer, Inc., after \$250,000 reserve for possible inventory decline and postwar adjustment and \$3,305,242 provision for Federal income and excess profits taxes, totaled \$1,498,616.

Makers of Domestic Laundry Units Given Quota To March 15

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tives of the industry to discuss restrictions beyond that date.

The quotas for the first half of March do not authorize companies to obtain or use materials in excess of quantities authorized under existing orders governing scarce metals or other materials.

The supplementary general limitation order L-6-b provides the following:

During the period beginning March 1, 1942, and ending March 15, 1942:

(1) No Class A manufacturer shall produce more domestic laundry equipment than the greater of the following two limits:

(a) 3,900 units, or (b) 30% of the monthly average of his factory sales of such equipment for the 12 months ending June 30, 1941.

(2) No Class B manufacturer shall produce more equipment than the greater of the following two limits:

(a) 1,875 units of such equipment, or
(b) 32½% of the monthly average of his factory sales of such equipment for the 12 months ending June 30, 1941.

(3) No Class C manufacturer shall produce more equipment than the greater of the following two limits:

(a) 570 units, or (b) 37½% of the

monthly average of his factory sales of such equipment for the 12 months ending June 30, 1941.

(4) No Class D manufacturer shall produce more than 47½% of the monthly average of his factory sales of such equipment for the 12 months ending June 30, 1941.

Priorities Official Sees Producers 'Forced' To Use of DD-25A

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showed how an airplane manufacturer, working on a war order, might issue a P-109 certificate for whatever he needs. The supplier may extend such certificates if the material he supplies is to become incorporated in the plane itself, but if it does not go into the actual plane the supplier may not extend the certificate. He must, however, supply the plane manufacturer's needs.

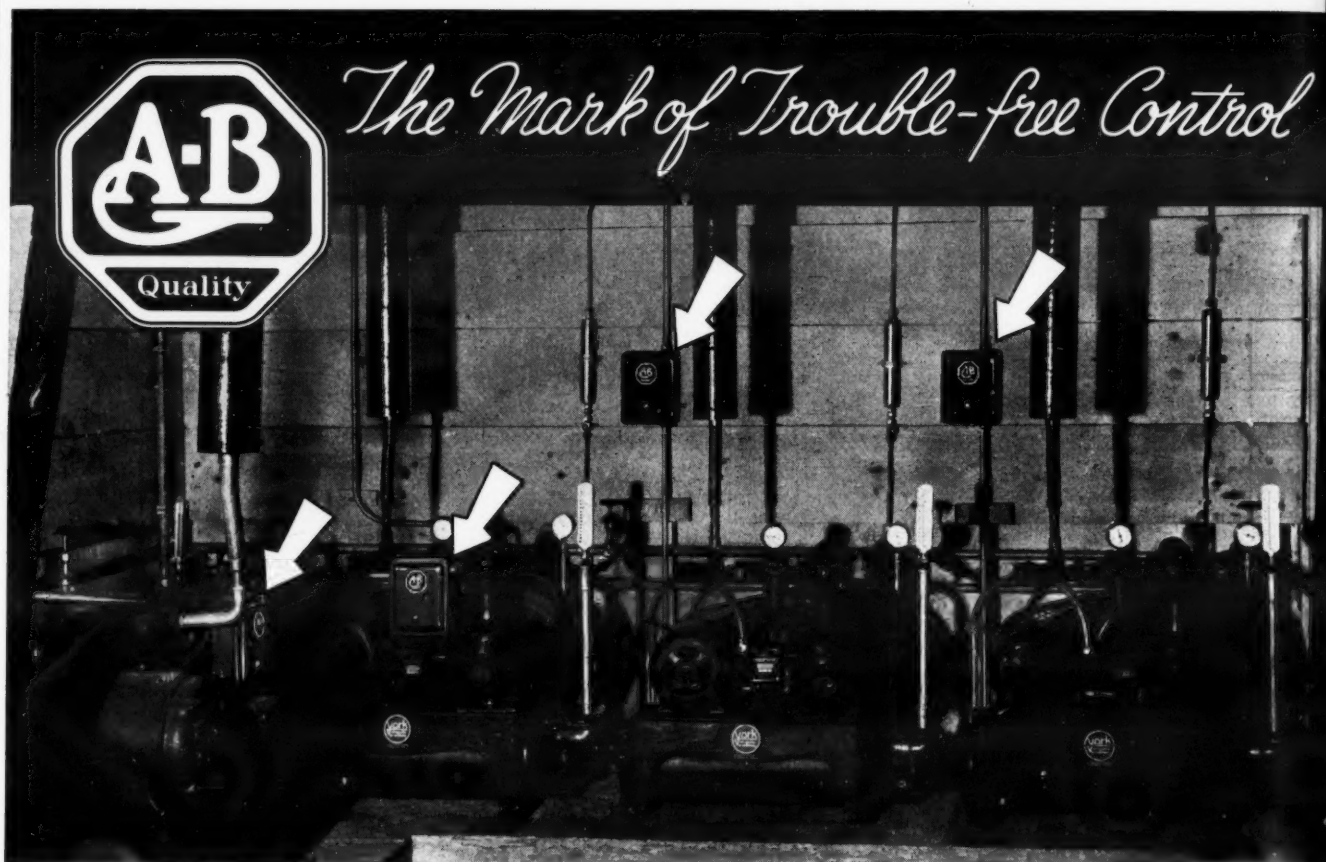
This latter factor tends to deplete the supplier's inventory, which can be replenished only if the supplier is operating under the PRP plan.

This development, said the speaker, will tend to get most suppliers under the PRP plan, and thus enable the WPB to get a complete inventory picture of each supplier.

The speaker declared that the entire priorities system no longer is guided by what is war production and what is essential production, but rather by what is the end use of a material or product, and each demand for materials is granted or refused on this basis.

Kansas City Store Doubles Used Refrigerator Dept.

KANSAS CITY, Mo.—To fill the gap caused by the curtailment of refrigerator manufacturing, the Jones Store here, which handles an annual volume of over 800 refrigerators, has doubled the size of its reconditioned refrigerator department.



Four Allen-Bradley Bulletin 709 automatic across-the-line solenoid starting switches. These starters provide reliable, maintenance-free control of direct expansion refrigeration units.

Do away with Contact Failures • • and Prevent Compressor Shutdowns

Trouble-free control is important in air conditioning and refrigeration systems. When motor starters fail because of burned contacts or sticky pivots and pins, you have costly shutdowns—and extra service and repair problems.

Allen-Bradley solenoid motor controls are built to eliminate maintenance. Contacts are of a patented silver alloy. They have a carrying capacity of at least 10 times their normal horse power rating. When oxides form on these contacts, they do no harm—because the oxides carry current just as perfectly as the original silver alloy contact. That is why Allen-Bradley solenoid contacts

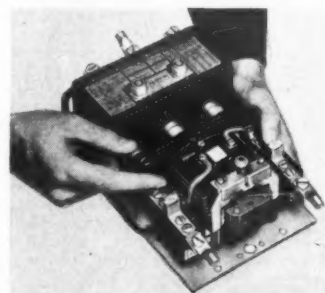
never require filing, cleaning, or dressing. They are maintenance-free.

And you need not worry about bearings, pins, pivots, or flexible jumpers in Allen-Bradley solenoid starters—there aren't any to worry about. The double break contacts are closed

and opened by the simple, straight line movement of the solenoid plunger.

Installation is easy, too. Lots of wiring space and plenty of knockouts in back and all sides of cabinets.

Specify Allen-Bradley trouble-free, maintenance-free solenoid motor controls . . . and avoid plant shutdowns.



There is only one moving part in the Allen-Bradley solenoid starter.

Allen-Bradley Company, 1313 S. First St., Milwaukee

ALLEN-BRADLEY

SOLENOID MOTOR CONTROLS